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The Metaphysics of Quality:

An Inquiry into Quality within the Polytechnic and Private Training Sector

A thesis

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Abstract

Quality, its definition and management, has a long-standing history within society. In the modern era the focus has been particularly in regard to products and services, to ensure that minimal standards are met, and continual efforts are made to improve experiences. The education sector has also felt the reach of compliance requirements and ideology of continual improvement of practice, under the banner of quality educational practice. Quality, as a concept, has received considerable attention, with one of the most notable being in the philosophical writings of Robert Pirsig and his development of a metaphysics of quality. In this thesis, Pirsig's metaphysics of quality will be investigated in the context of the Polytechnic and Private Training Sector to determine its place in our understanding of reality. Pirsig's metaphysics is founded in the philosophical positioning of the ancient philosophers Plato and Aristotle and includes elements of Zen Buddhism and Eastern practices. These philosophical positions are examined to established quality as a concept which holds no physical form, nor location in time or space, beyond its application to an object or experience. In the development of a neo-metaphysical interpretation of quality the reader will be subject to several thought experiments as aspects of Kantianism philosophy and quantum mechanics are explored to shift from Pirsig's view of quality as an event to the notion that quality as an experience. Further, the measurement problems identified within the concept of quality will be examined. In keeping with Pirsig's narrative style chautauqua will be presented to support the philosophical discussions and illustrate educational quality issues and the journey to knowledge discovery. Once the neo-metaphysics of quality has been established, demonstrations will be given on its practical application in the identification of

quality in the polytechnic and private training sector environment and beyond. Finally, what is proposed is a new approach to the interpretation of quality, and potentially a new era in quality management termed quantum quality.

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Figures, Tables and Equations

Reflecting Forward

As this thesis is grounded in the works of Robert Pirsig (1974, 1991), the ontology utilised in his formation of the Metaphysics of Quality will be reflected in the both the theoretical construction and the structure of this work. This ontological approach is known as Dialectical Monism within the Western Philosophy, having first been mentioned by Heraclitus (535-475 BC). Dialectical Monism is an ontological position that holds that reality is ultimately a unity whole, however it distinguishes itself from the ontological position of Monism by asserting that this whole necessarily expresses itself in dualistic terms. That is, unity are complementary polarities or opposed sides of experience and perception yet their existence is dependent on each other. Heraclitus (535-475 BC), a pre-Socratic Greek philosopher, offered the following as a means of understanding dialectical monism:

"By cosmic rule, as day yields night, so winter summer, war peace, plenty famine. All things change Fire penetrates the lamps of myrrh, until joining bodies die and rise again in smoke called incense."

(Fragment 36 (Sallis & Maly, 1980))

To expand on Dialectical Monism, mention needs to be given to the ontological system of Universal Dialectic, which is viewed as a single fundamental creative principle of inherent complementarity (Sartre, 2004) and its close relationship with the Eastern concept of 'taiji', a Chinese cosmological term for the supreme ultimate, better known within Western culture as 'Ying and Yang'. Ying and Yang being described as opposite or contrary forces which are interconnected and interdependent in the natural world: an example of this would

be the polls of a magnet. This connection between dialectical monism within both Western and Eastern philosophy is to be considered as an important note as it is a further reflection of the ontology that Pirsig utilised in his development of the Metaphysics of Quality and indeed Pirsig's philosophical world view. As such both Western and Eastern philosophy will be interwoven throughout this thesis as we explore the Quality of polytechnic and private training sector from a metaphysical perspective.

With Zen practice there is the story of the Ox-herder, a story which depicts the journey of an individual towards a state of Enlightenment. Although a state of enlightenment is not the goal of this thesis, parallels can be drawn between the journey of the Ox-herder and the journey undertaken taken by the author of this thesis. The story of the Ox-herder is depicted though a series of ten illustrations and poems which have been provided in Appendix One. Garfield and Prist (2009) suggest that the series of images should be viewed as three distinct phases: the first seven images represent the calming of the 'mind' and initial analysis of reality to obtain a state of 'emptiness' (image 8), which is the second phase. The third suggested phase, the final two images (9 and 10), is the realisation of the emptiness which was obtained in the second phase. In context of this thesis, the progression of the inquiry into metaphysics of quality within polytechnic and private training sector mirrors the journey of the Ox -herder.

Table 1. Chapter Structure

Chapters	The Ox Herder	Chautauqua	Thought Experiments
Chapter One: Overview	1	Chautauqua 1 Chautauqua 2 Chautauqua 3	Thought Experiment 1
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Chapter One: Overview

(van den Dungen, 2016, p. 10)

I. The Search for the Bull

In the pasture of the world
I endlessly push aside the tall
grasses in search of the bull.
Following unnamed rivers,
lost upon the interpenetrating
paths of distant mountains,
My strength failing and my
vitality
exhausted, I cannot find the bull.
I only hear the locusts chirping
through the forest at night.

(Koller, 2016, p.3)

Within today's neo-liberal society everything is measured, assessed, compared and evaluated, Power (2003) to determine its value, viability and impact. As Power (1997) stated *"people are constantly checking up on each other, constantly monitoring the on-going streaming of commutative exchanges and accounts that make up daily life"* (p.1). These accounts only become objects of explicit checking in situations of doubt, conflict, mistrust or damage. In some environments where personal harm may occur, checks and balances are required, and the auditing of those is a necessity to ensure well-being. Auditing around health and safety issues would be one such example of this. Increasingly though, individuals and organisations find themselves subject to new or more intensive evaluation and auditing requirements. The auditors and audits themselves are subject to increasing scrutiny which leads to the question of how much explicit checking is enough? As Power (1997) suggested *"when does the demand for monitoring become pathological?"* (p.2). To put this into context let's consider auditing within the polytechnic and private training sector environment, often referred to as 'evaluations; which as Power (1997) points out is within the array of often ambiguous terms which auditing is known. Increasingly the focus on quality is becoming of greater concern within the education sector, (Biggs, 2003) with academic staff undergoing an assortment of evaluation-type processes within their day-to-day academia activities, including peer-review for research publications by subject matter experts, research funding applications and grant progress updates, moderation and teaching observations, student feedback, as well as many others. All of which are to provide a level of assurance regarding the educational provider's ability to carry out the functions they are required to undertake to a quality standard. These assurance mechanisms are taken from both internal and

external sources and would suggest, all being equal, that a high level of quality could be stated. But is this in fact the case? Are the assurance mechanisms indeed proving a true reflection of 'quality'? For classification, examination of various academic evaluation methods will be considered with reference to the notion of quality primarily because it is a level of quality assurance that the evaluations/audits are seeking to provide.

The concept of quality can be viewed as nebulous in nature with a wide variation of accepted definitions (Davies, 2003). Pfeffer and Coote (1991) considered quality to be 'a slippery concept', whereas Ellis (1993) considered it to be an 'ambiguous terms with connotations of both standards and excellence'. Davies (2003) considers that quality 'embraced but was not synonymous with effectiveness, efficiency and accountability'. Even one of the greatest thinkers of all time, Plato, only offers a cryptic reference to what quality may be stating *"quality is the 'knife-edge' of experience found only in the present, known or at least potentially accessible to us all"* (Phaedrus, 258d). Pirsig (1974) captures this ambiguity around defining quality with one of his most quotable quotes *"Quality … you know what it is, yet you don't know what it is"* (p. 231). He goes on to state that *"if you can't say what quality is, how do you know what it is, or how do you know that it even exists?"* (p.231).

Robert Pirsig, was also confronted with the question *"what is quality?"* when he taught creative writing at Montana State University in 1958 after being asked by a colleague *"Are you teaching quality today?"* This question led him on a long journey, where the very fabric of reality was questioned and a deeper metaphysical exploration of the concept of quality was undertaken. Parallels to

Plato's discussion in *Meno* can be drawn which structures itself along a similar line of inquiry. The text starts with a question from Meno to Socrates:

> **Meno:** *"Can you tell me, Socrates – is being good something you can be taught? Or does it come with practice rather than being teachable? Or is it something that doesn't come with practice or learning; does it just come to people naturally? Or some other way?"* (Meno, 70a)

To which Socrates insists first on investigating what being good is because, until they know that they are unable to know whether it can be taught:

> **Socrates:** *"You seem to think I might know whether being good is something you can be taught, or how exactly people become good, when the fact is, so far from knowing whether or not it's teachable, I haven't even got the faintest idea what being good is!"* (Meno, 71a)

This question posed by Socrates bears a resemblance to Pirsig's inquiry regarding what quality was and the same can be said here, to teach quality and measure it we need to know what 'quality' is, or more importantly 'that quality is'?

Thought Experiment One: Quality in a Box

To illustrate, consider this thought experiment as a variation on the classic 'Beetle in a Box' thought experiment proposed by Wittgenstein in his 1953 text Philosophical Investigations. The original thought experience suppose that everyone has a box that only they can see into. They have no visibility of the content of anyone else's box. Everyone then describes what they see in their box as a 'beetle'. Everyone knows what a 'beetle' is from their own examination of what is in their box, likewise you of yours. What Wittgenstein suggests is that in

this situation whilst each individual is talking about their beetle, there might be different objects in everyone's boxes, or even nothing at all in the box.

What this analogy demonstrates is the inability for individuals to experience or perceive the world from anyone else's perspective and is a part of Wittgenstein's Private Language Argument (Wittigenstein, 2009). This Argument refers to how individuals use language to describe their private experiences and how this language is used to communicate with others.

Pirsig's working definition was that *"quality is a characteristic of thought and statement that is recognised by a non-thinking process. Because definitions are a product of rigid, formal thinking, quality cannot be defined"* (Pirsig, 1974, p.260). He suggests that Quality cannot be defined because it empirically precedes any intellectual formal construction of it, primarily because quality exists always as a perceptual experience before it is formally considered either descriptively or academically. It is this metaphysics position which will provide the starting point into this exploration of 'quality' within the polytechnic and private training sector context.

For this variation consider that you have an 'object' called 'Quality' in the box. Like the original experiment, only you have visibility of the contents of your box. Now you are asked to describe the contents, 'Quality', of your box to others, based on your experience with this object. As with the 'beetle' in the box everyone will describe their perceived interpretation of the object. To make the experiment more difficult, at no time can the individual produce a 'tangible' object from their box to show others. Therefore, the existence of the object could

be viewed at the most fundamental level as a construct of the mind. One point which needs further examination.

Research Objectives

The objective of this research is to explore the concept of quality as it applies to the polytechnic and private training sector. To conceptualise this 'phenomenon' a philosophical approach is proposed to examine the concepts of quality, both in the wider and polytechnic and private training sector sector; critical analysis of the philosophy of quality, including the notion of value, provide a clear definition for quality as it applies to polytechnic and private training sector; and finally offer a conceptual framework for the evaluation and/or measure of quality practice within education. The research objectives are stated below and reflected in the chapter structure of the thesis.

1. Examine the concept of quality, with a focus on the polytechnic and private training sector
2. Analysis and critique the metaphysics of quality
3. Re-define the metaphysics of 'quality' as it applies to the polytechnic and private training sector
4. Offer a conceptual framework on how to measure/evaluate quality in education

Ethical Statement

The proposed research is based on a philosophical inquiry and will not involve research on/or engagement with, humans or non-humans (animal). As such no ethical statement is provided.

Introduction

To contextualise this thesis, the remainder of this chapter will offer an introduction to Robert Pirsig, including his seminal work *Zen and the Art of Motorcycle Maintenance*, and introduce the use of chautauqua and fictional philosophical narratives as methods of illustration and communication philosophical ideas and concepts. This will be followed by an overview of Neoliberalism and the education reform in New Zealand, and how this shaped the evaluation and managerialism of educational delivery, and the quality thereof. This will cover Quality Assurance Mechanisms, External Evaluation and review process, before moving on to introduce why there is a need to reconsider quality as a concept. The principle premise within this chapter is that:

The rise of neoliberalism has led to the private sector management of the polytechnic and private training sector through the educational reform (Codd, 1989) as illustrated in the Picot report where emphasis is placed on accountability, which is assessed through regular reviews of the **quality** of the institutes educational performance (Taskforce, 1988, p.5), such as the External Evaluation and Review undertaken by the New Zealand Qualification Authority.

And that:

The quality management system used within the External Evaluation and Review process is based on a **quality assurance** which is grounded in traditional industrial quality management, and as such focused on materialistic aspects of a ‘product’ rather than on its intrinsic value.

Pirsig and the Art of Motorcycle Maintenance

Robert Pirsig

Robert Pirsig was born in 1928 and raised in Minneapolis, Minnesota: USA. At age 9, Pirsig was assessed as having an IQ of 170, which allowed him to skip several grades and was awarded a high school diploma at age 15. Pirsig then proceeded to enrol at the University of Minnesota majoring in biochemistry. However, during his laboratory work in chemistry he became increasingly troubled by the existence of more than one workable hypothesis to explain any given phenomenon. He became so fixated by this question he lost interest in the remainder of his studies and failed to maintain significant grades leading to his eventual expulsion from the university. This resulted in Pirsig enlisting in the Armed Forces. After serving in South Korea for the United States Army, he returned to the U.S. at which time he proceeded to complete his earlier education. However, this time Pirsig majored in Eastern Philosophy being awarded a Bachelor of Arts. Subsequently Pirsig attended Banaras Hindu University to further study Eastern Philosophy although he did not obtain a qualification. Additionally, he undertook graduate work in philosophy and journalism at the University of Chicago before he became a professor at Montana State University in 1958 where he taught creative writing. During this time Pirsig become absorbed in the question of what defined good writing and in what generally defined good or quality. It is believed that this philosophical investigation led to his mental illness and the birth of Phaedrus, the alternative version of Pirsig himself, who is referred to in the third person through both his novels: *Zen and the Art of Motorcycle Maintenance – An Inquiry into Values* and *Lila – An Inquiry into Morals.*

Zen and the Art of Motorcycle Maintenance

Zen and the Art of Motorcycle Maintenance is a first-person account of a 17-day motorcycle journey taken by the author and his son from Minnesota to Northern California. Pirsig's journey with his son is scattered with numerous philosophical discussions, most of which are tied to the author's past and told through a third person known as Phaedrus, who is central to this paper. These discussions referred to as Chautauqua by Pirsig include epistemology, emotivism and the philosophy of science, with the primary investigation being centred on the meaning and concept of quality. The text itself is considered to be of the philosophical fiction genre and has sold in excess of 5 million copies worldwide, Pirsig being generally regarded as an American cultural icon in literature. It was originally rejected by 121 publishers, more than any other bestselling book as indicated by the Guinness Book of Records.

(image retrieved from https://www.theguardian.com)

Figure 1. Robert Pirsig

The Use of Chautauqua and a Fictional Philosophical Narrative

"I'm thinking about a series of lecture-essays – a sort of Chautauqua"

(Pirsig, 1974, p. 216)

To reflect the influence of Pirsig's works on this thesis the use of fictional philosophical narratives and Chautauqua will also be utilised throughout this research to aid in the illustration of the philosophical arguments and concepts being utilised. Fictional philosophical narratives have been previously used by both philosophers and pseudo-philosophical authors alike. This works takes on the more traditional writing of Plato *The Republic* to the more contemporary works of Pirsig's *Zen and the Art of Motorcycle Maintenance*.

Chautauqua was an adult education movement centred in the United States during the 19th and 20th centuries (Hurlbut, 1921). The object was to bring education, culture and entertainment to whole community groups with lectures being the primary form of delivery. The use of narrative within qualitative research is well documented. Sandelowski (1991) offers a clear description of storytelling as an effective narrative technique, stating that such narratives offer great insights into how people interact and understand the environment in which they find themselves. Mucina (2011) also provides a rationale for the use of storytelling, indicating that it offers not only a mechanism for collecting oral histories, but also a vehicle for teaching.

As Pirsig has *Phaedrus*, the author of this thesis will have *Mùrén* (牧人), which is the Chinese translation of herder, as the principle character who will

feature in the Chautauqua / narratives presented through this thesis. A secondary character Niú (牛), which is the Chinese translation of ox, will also play a significant role within the narratives used. The storytelling mechanism will be used to illustrate both examples of quality management within the polytechnic and private training sector and the philosophical questions that it raises as *Mùrén* begins and continues his journey through academic, as well as demonstrating the intellectual, almost spiritual, growth which occurred as a result of this investigation.

Chautauqua One

Actors:
Mùrén, Colleague One, Colleague Two, Head of School, Programme Manager, Senior Academic One and Senior Academic Two

Mùrén's introduction to quality within the education sector really started when he took up a teaching position at a tertiary education provider. Mùrén was to teach two courses within a Bachelor of Social Science programme. He had one week to prepare educational material before his first group of students arrived. Some materials had already been developed as neither were new courses and had in fact been delivered by the institute for several years. These materials included standard documentation, such as one would expect; course outline, learning objectives, assessment guide and a book of readings as there was no textbook. Naturally, he reviewed these materials as part of his class preparation. Unwrapping the seal of one set of the booklets, Mùrén recalled the excitement he had felt as a student just starting on each new journey of discovery with every new topic.

Mùrén unwrapped the first of the book of readings which he would be using that semester. He read over the course outline, learning objectives and assessment guide before turning to the book of readings. He opened the book and turned to where he expected to find the table of content, instead of which Mùrén found the first article, poorly photocopied with a handwritten reference to the article source at the top of the page. As he read through the first article he was somewhat surprised at its quality, not of the article itself but of its presentation. Slight changes of page orientation during the copying process meant parts of sentences were missing disrupting the flow of the text; in places the text was so faint it became difficult to read, and on one page the sentences had been blanked out where obvious highlighting had occurring in the original. Mùrén moved onto the second article in the book of reading to encounter the same thing. Poorly copied pages, faint text, hand-written comments from the original version written in the margins, and multiple numbers written around the pages where it had obviously featured in different parts of different books of readings. Mùrén sat back and reflected on what he had just seen, with a feeling of disappointment creeping over him.

After some time of reflection on the quality of the materials he had been given he went to discuss his concerns with his colleagues.

> Mùrén: “I’ve just been looking over the book of readings for my first topic, the printing is not very clear. What are the readings for your course like?”
>
> Colleague One: “What do you mean?”

Mùrén showed them the book which he had been reviewing, pointing out the poorly copied pages, faint text, hand-written comments and multiple numbers written around the pages.

Colleague Two: “And what is your point?”

Mùrén: “The quality of this! Our students are paying considerable money to receive a good education, sure this covers the resource we provide them?”

Colleague One: “These are the materials we are given to use, so we use them.”

Mùrén: “And you are fine with that?”

Colleague Two: “Yes. What’s your problem?”

Seeing that all he was doing here was upsetting and aggravating his colleagues, Mùrén ends the discussion and thought it best to talk to the programme manager about his concerns with the materials he was to hand-out to his students the following week, and his feeling about how they provided a reflection of the quality of the programme and services the institution was providing. So, Mùrén arranged a meeting to do just that. Unfortunately, this was not to occur until the following week and Mùrén decided that he would not hand out the book of readings until after he had had this meeting.

Over the following days he prepared a second book of readings based on the first, same articles in the same order but copied from the original journal articles and book chapters. Not copies of copies of copies. Mùrén included a context page with each article correctly referenced and numbered. What he had

produced was a copy of the readings that he expected to see when he opened it the week before with all that excitement.

~~~

On the day of the meeting with the programme manager, Mùrén took both versions of the book of readings, the original and the 'new' version he had prepared. On his arrival at the meeting he found not only the programme manager, but several senior lecturers and the Head of School. He was taken aback by their presence at this meeting. Mùrén introduced himself, remembering that he had only been an employee of the institute for a week and this was the first time he met with the Head of School. After introductions had been made, the meeting started.

> Head of School: "I have been hearing that you are not happy with the quality of our materials. I am surprised at this as I have never heard such a remark before. In fact, I believe that materials were developed by one of our senior academics"
>
> Programme Manager: "Yes, indeed that is the case. The base materials, including the books of reading were developed several years ago."
>
> Senior Academic One: "Yes, that is correct I did create them. Is there a problem?"

All eyes were focused on Mùrén as they awaited his response to the question.

> Mùrén: "I have no issue with materials selected or the academic merit, my concern is with the quality of the materials in its current form."
~~~

Mùrén proceeded to present them with his findings and his concerns about giving these resources as they currently stood to students and how it may reflect on the institute in general. Mùrén also presented his ‘new’ version showing how it could look.

Head of School: “Are you suggesting we reprint all the books of readings? And how do you plan on recovering the cost of this?”

As this does not sound like a feasible option Mùrén provided several suggested for how the quality of materials used could be improved for future occurrences. One such suggestion was the use of some form of quality control. A notion he had come across previously with his work in the healthcare section when checking off the correct allocation of medication per packet. It was a very ‘manufacturing approach to quality’ but he felt that it would work sufficiently here as a method of assessing the quality of resources such as books of readings. Mùrén also offered the suggestion that articles and chapters used in all books of readings have a review period which would allow for the inclusion or changes of readings as academic staff came across new research relative to the topics being taught.

Senior Academic Two: “Next you’ll be suggesting we review our teaching materials every year.”

Senior Academic One: “Yes. And of course, assessments.”

Senior Academic Two: “Let’s review everything!”

This is what Mùrén was suggesting, however he did not say anything. The tension in the room was increasing. Mùrén had obviously ‘upset the academic apple cart’ here. After all he was the ‘new kid on the block’ and was it really his

place to be questioning his academic seniors as to how such things were to be done. But questioning is exactly what Mùrén felt he needed to do.

Neoliberalism and the Educational Reform

In this section I will argue that the rise of neoliberalism has led to a private sector approach to the management of the polytechnic and private training sector through the education reform. The purpose of this argument is to show how economic and political theory has impacted on the polytechnic and private training sector and to offer a fundamental underpinning on which current education management and leadership practices are based.

This section will take the following structure in order to clearly and logically demonstrate the required and relevant information to justify this argument. Firstly, the theoretical concept of neoliberalism will be explained, followed by an historical overview of its development. Secondly, the education reform of New Zealand will be outlined with a focus on its impact on the polytechnic and private training sector before moving onto examining the linkages between neoliberal practice and the reform. Once this foundation for the argument has been laid, the exploration of what this means and 'looks like' in the polytechnic and private training sector will be given, before moving onto the argument which is central to this chapter.

Neoliberalism

The key theoretical concept with this chapter's argument is that of neoliberalism, and our attention must firstly be given to understanding of this concept. Over the past thirty years the concept of neoliberalism has been the subject of widespread political and academic debate, with several authors

suggesting it to be the dominant ideology shaping our world today (Thorsen & Lie, 2006).

In its broadest context, neoliberalism can be viewed as a thesis of social and economic approach that transfers control of economic factors to the private sector from the public sector. In order to determine the role of neoliberalism within the context of the education sector, however, a more detailed definition is needed and unlike Saad-Filho and Johnston (2005) I am not happy to leave the concept completely undefined. Instead, examination will be given to the definitions provided by Harvey (2005) and Blomgren (1997).

Defining Neoliberalism

Harvey has been identified (Thorsen & Lie, 2006) as one of the few who has tried to provide a definition to the wide-ranging concept of neoliberalism, in his 2005 text entitled *Neoliberalism – A Critical Reader*, he offers the following:

> *"Neoliberalism is in the first instance a theory of political economic practices that proposes that human well-being can be best advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets and free trade. The role of the state is to create and preserve an institutional framework appropriate to such practices. The state has to guarantee, for example the quality and integrity of money. It must also set up those military, defence, police and legal structures as functions required to secure private property rights and to guarantee, by force if need be, the proper functioning of markets. Furthermore, if markets do not exist (in areas such as land, water,*

> *education, healthcare, social security, or environmental pollution) then they must be created, by state action if necessary. But beyond these tasks the state should not venture. State interventions in markets (once created) must be kept to a bare minimum because, according to the theory, the state cannot possibly possess enough information to second-guess market signals (prices) and because powerful interest groups will inevitably distort and bias state interventions (particularly in democracies) for their own benefit"* (2005, p.2).

This suggested definition includes the strongly held belief that the world has experienced *"an emphatic turn towards neoliberalism in political-economic practice and thinking"* (Thorsen & Lie, 2006) with an emphasis on neoliberalism as a theory of political economic practice rather than as a complete political ideology (Harvey, 2005). It suggests human wellbeing and the best advancements are made by entrepreneurial freedom and skills that are characteristic of the free markets and free trade. But what does this mean? The definition suggests that in order to maximise human potential state-based regulations should be removed to allow for economic growth and social development. The action is also captured with Harvey's definition where he indicated that State intervention should not exceed that of merely providing an institutional framework for such practices to occur, if this is not the case, then the State must provide the necessary structures and functions for this to occur, by force if necessary, but beyond this the State should not intervene.

The second definition which will be examined was provided by Blomgren (1997).

> *"Neoliberalism is commonly thought of as a political philosophy giving priority to individual freedom and the right to private property. It is not, however, the simple and homogeneous philosophy it might appear to be. It ranges over a wide expanse in regard to ethical foundations as well as to normative conclusions. At the one end of the line is 'anarcho-liberalism', arguing for a complete laissez-faire, and the abolishment of all government. At the other end is 'classical liberalism', demanding a government with functions exceeding those of the so-called night-watchman state"* (p. 224).

On first reading one can identify an overlay in the basic characterisations between both of the given definitions, however, Blomgren's offers greater emphasis on the internal diversity of neoliberal thought (Thorsen & Lie, 2006). Stemming from this Blongren's version considers the scope within neoliberalism, ranging from the 'abolishment of all government' and a rather 'classical liberalism' state to the other end with functions exceeding 'night-watchman' State practices.

The definition for the context of this thesis builds on Blomgren and Harvey, and is supported in Thorsen and Lie (2006) text where neoliberalism will be viewed as:

> *"A loosely demarcated set of political beliefs which most prominently and prototypically include the conviction that the only legitimate purpose of the State is to safeguard individual, especially commercial liberty, as well as strong private property rights. This includes the belief that freely adopted markets mechanisms is the optimal way of*

> *organising all exchanges of goods and services. Additionally, a belief that the state ought to be minimal or at least reduced in strength and size, and that any transgression by the State beyond its sole legitimate purpose is unacceptable."* (p. 14)

Thus, the understanding and definition for neoliberalism becomes a loose set of ideas of how the relationship between the State and its external environment ought to be organised and is not viewed as a complete political philosophy or ideology (Blongren, 1997; Malnes, 1998; Thorsen & Lie, 2006).

New Zealand Education Reform

Following the 1984 national elections, a Labour-led Government came into power, and with it radical changes to the economy, which had not been fully foreshadowed in its manifesto as presented by Snook *et al.* (1999). The education portfolio was held by Russel Marshall, who in-keeping with the earlier Labour Governments, followed a progressivist policy. This policy saw education becoming more accessible with a broader curriculum. Under the leadership of David Lange, and with pressure from Douglas and the Treasury, Marshall set up a taskforce to investigate and make recommendations on the administration of education under the chair of businessman, Brian Picot. Under Labour's second term, treasury provided a Brief setting out a new approach to education which *"stressed the centrality of economic rather than 'education' objectives"* (Snook *et al.*, 1999, p. 2). The primary argument from Treasury was that formal education was an unavoidable part of the market economy and was such that the government must therefore be concerned with the 'effectiveness and profitability' of its expenditure. The Taskforce and the Department of Education produced three resulting policy documents: 'Tomorrow's Schools' (Lange, 1988a) for the

compulsory education section, ‘Before Five’ (Lange, 1988b) for kindergarten, and the ‘Learning for Life’ (Lange & Goff, 1989) policy document for the tertiary sector.

In 1993, Peter Ramsay, a member of the taskforce pointed out that there were two agendas which highlighted the emergence of neoliberal influence in the education sector. The first being favoured by the educators which fostered a partnership between parents, or parents as partners and the other favoured by the Treasury and business which fostered competition and choice, or parents as customers (Ramsay, 1993). In the tertiary education sector this shift was reflected in the raising of fees in 1990 for $120 per year to $1250.

The globalisation and associated commercialisation of the education system in New Zealand has continued to grow under successive National Governments, even though they campaigned to abolish tertiary fees, the introduction of a new funding policy has seen a steady rise. At this time, the student loan scheme was introduced in order to provide all students with access to the funding now required for a tertiary student. This access to funding again saw an increase in the fees students would have to pay. This payment of fees saw students as customers in a very similar fashion to the concept of parents as customers as suggested by Ramsay (1993).

Politics of Evaluation and Managerialism

One of the central concepts is that of political action within the evaluation of education. However, the influence and effects that politics has on educational evaluation is often missed due to the way in which evaluations are constructed

and undertaken. In essence, politics is about power and control (Codd, 1989). This is somewhat reflected in the 1988 Picot Report which stated that:

> *"Good management practices are essential if the administration is to be efficient and effective. This means that those working in the system must have detailed and clear objectives,* ***control*** *over the resources needed to carry out the objectives …* [and] *also be* ***accountable*** *for the decisions they make"* (emphasis added) (Taskforce, 1988, p. 5).

With this accountability being assessed through *"participating regularly in reviewing the* ***quality*** *of the institution's education performance"* (emphasis added) (Taskforce, 1988, p. 51-52). Whilst most of the 'Tomorrow's Schools' reform involved the notion of partnership, participation, professional leadership and collaboration, the underlying philosophy was dominated by managerialism. As Fitzsimons (1999) clearly identifies, the restructuring of the education sectors has seen a significant shift away from an emphasis on administration and policy to an emphasis on management, which has been greatly influenced in the United Kingdom, Australia and New Zealand. Fitzsimons goes on to imply that the New Public Management approach, has been seen as the legitimating basis and instrumental means for redesigning state educational bureaucracies and education institutions, and as such shifted from educational accountability with a focus on 'impact and process; to a focus on 'outcomes and products', which has a neoliberal sense about it. Klikauer (2015) however, makes a very clear distinction between managerialism and neoliberalism which is worth considering.

Klikauer (2015) states that although historically the rise of managerialism has gone hand and hand with that of neoliberalism and other such market-oriented

reforms, they are not synonymous even though they share certain affinities. In other words, neoliberalism can be viewed as economically and politically to serve the common good, whereas managerialism can be viewed as functions of managerial capitalism and not directed at serving the common good.

This New Public Management approach was to be a strong influence on the restructuring of education in New Zealand with particular focus given to:

- The shift from the use of input controls and bureaucratic procedures and rules to a reliance on quantifiable outputs measures and performance targets;
- The devolution of management control coupled with the development of new reporting, monitoring and accountability mechanisms;
- The disaggregation of large bureaucratic structures into quasi-autonomous agencies;
- The imitation of certain private sector management practises such as corporate plans, performance agreements and mission statements, the development of new management information systems;
- A stress on cost cutting and efficiency (OECO Report, 1995, p.19)

In effect, the objective of the reform was to make systems more efficient and responsive to the 'client' thus altering the relationship between the teacher (provider) and parents and young adults in the case of the polytechnic and private training sector (consumers). This shift, as Klikauer (2015) indicated, moved the accountability from an input/process focus to an outcome/product focus, where educational providers were not only evaluated in terms of 'value-added' but also

against performance standards. This has resulted in a culture which holds greater focus on what can be recorded, documented and reported on in regarding teaching and learning, rather than the educational process itself.

Quality Assurance Mechanisms

The peer review process for the publication of academic works and research is the evaluation of works by one or more subject matter experts of the work to determine a paper's suitability for publication. This process can be traced back to the Royal Society of London in 1665 (Wagner & Steinzor, 2006) with the first peer-reviewed publication being suggested in the 'Medial Essays and Observations' published in 1731 by the Royal Society of Edinburgh (Benos, 2007). The peer review system currently used has evolved from the 18th Century process (Benos, 2007) and has been common practice since the mid-20th century (Blow, 2015) with the objective to continuously improve quality, uphold standards and provide certification for published academic work. More recently, the practice of open peer review (Smith, 1999) has been gaining momentum, increasing the transparency within the process and accountability for reviewers, taking the process from a closed to an open system. What was been demonstrated so far is one of the scholarly methods (Boyer, 1990; Glassick, Huber & Maeroff, 1997) which may be taken to apply intellectual rigour on an institutional level to ensure the quality of research produced is of an expected level without any stipulation as to what 'quality' is.

Research grants are another means by which the quality of the research can be monitored. A research grant is funding for a specific project and requires some level of compliance and reporting. The grant application process requires the submission of a proposal outlining the context, scope, and research question(s)

to be addressed. A key feature of the funding proposal is the budgeting and financial requirements and it is often this financial component which it is audited against. As with the peer view publication process, research grants go through a selection process to ensure for quality and suitability with the funders overarching objective, however, no indication of what ‘quality’ is is provided.

If it is the case that researchers within the polytechnic and private training sector environments have undertaken research funded with a research grant and had their research published in a peer review publication they have been through several evaluation processes to produce a single research output, it follows then, that the level of quality assurance which can be placed on the researcher and the the polytechnic and private training sector provided must be high. However, if it is the case that throughout the assurance mechanisms undertaken there was no clear identification as to what that ‘quality’ is, how can the claim that the researcher and the polytechnic and private training sector provider is of ‘high quality’? Is it not the case that what has been shown is that the work produced meets the criterion of some predetermined standard?

Now let’s give consideration to teaching quality. In line with robust scholarly methods used within academic research, similar principles are applied to the teaching and assessment methods utilised within the polytechnic and private training sector setting covering internal, external and stakeholder evaluations and audits. Of these teaching and assessment methods moderation is the most commonly known. Moderation, in an academic sense, is used to ensure consistency and accuracy in the marking of student assessments, and can be conducted in several different manners (Wyatt-Smith & Klenowski, 2014) including internal, external, peer and group moderation approaches. Many authors

(Adie, Lloyd, & Beutel, 2013; Beutel, Adie, & Lloyd, 2014; Bloxham, 2009; Coates, 2010) have stated that moderation is an effective institutional process by which assurance of robust assessment processes can be indicated, which in turn provides a high degree of standardisation across academic procedures.

Teaching and peer observations (Atkinson & Bolt, 2010; Yiend, Weller & Kinchin, 2014) are other mechanisms by which levels of internal and external assurance of effective educational practices can be provided, keeping in mind of course that all teaching staff are required to be deemed competent teachers on appointment. This process is to ensure levels of competency are maintained and to suggest any areas for improvement that may be identified. In most cases, teaching and peer observations are completed with student feedback and evaluation (Centra, 2000), whereby individuals 'receiving services' are able to present their views (Jena & Chakrabory, 2014) and the evaluation of the academic's ability to effectively present and teach.

The various teaching and research auditing discussed thus far are, for the most part, overseen by a faculty or university wide academic quality assurance unit, comprising quality management staff and internal auditors. The objective of such a unit is to provide assurance regarding the levels of quality already established through the various assurance mechanisms, or to gain assurance regarding the levels of assurance. Effectively, this is to seek out the truth that the mechanisms in place are providing an accurate reflection on the practices in place: Audit B needs to demonstrate that Audit B is doing 'Y'. To achieve this objective, self-improvement audits within programmes, schools and faculty are untaken, documented and reported accordingly. However, 'Y' or 'quality teaching' remains an unknown. This level of auditing goes beyond that of internal only; with

Government-driven audits within schools, across faculty and university wide, in order for them to be assured that all professional standards and practices are in place. Effectively Audit C needs to demonstrate that Audit B is doing 'Z' and that Audit B demonstrates that Audit A is doing 'Y', where 'Z' is an assurance mechanism, for 'Y'. Whilst it is noble to seek out a high level of assurance that all information is an accurate representation of current information (Knechel, 2013) it needs to be clear as to what is exactly under investigation. How can 'Z' provided assurance that 'Y' is effective if 'Y' is undefined? As Power (1997) states *"there is a continuing struggle about teaching and research quality as the auditable object"* (p.103) with his option being that the *"concept of quality has hovered uneasily between definitions which emphasise outcomes and those which emphasise the processes for determining outcomes. Such arguments are not just semantic but have implementations for the way in which quality can be monitored"* (p.103).

External Evaluation and Review

It is at this juncture that elements of political signification need to be considered. Nevo (1995) categorised academic evaluations into four groups: Formative, Summative, Socio-political and Administrative, which Parlett and Hamilton (1997) further classified into two evaluative paradigms: Agricultural-botany and Social-anthropological, depending on the underlying rationale for the audit. The focus here will be on the social-anthropological paradigm which positions well within the learning milieu of the polytechnic and private training sector. The social-anthropological approach to educational evaluations encompasses the education organisation(s) or programme(s) in their entirety, rather than solely providing a quantitative measure. With this paradigm Parlett

and Hamilton (1997) offer the concept of the descriptive and interpretative illuminative evaluator, which can be aligned with Schön's (1983, 1987) 'reflective practitioner' that is frequently referred to in educational practice literature, and certainly features in New Zealand's External Evaluation and Review (EER) process. Through the historical context of growth and adaption of educational evaluation measures; from quantitative, to qualitative, to the inclusion of self-assessment, we are able to see the change in political focus within the polytechnic and private training sector environment. The restructuring of funding criteria from the 'bums on seats' to 'student outcome focus' has seen a significant increase in the usage of internal and external audits, with a noteworthy reference to the External Evaluation and Review (EER) process.

The External Evaluation and Review is a periodic evaluation of the polytechnic and private training sector organisations under the scope of Institutes of Technology and Polytechnics, Registered Private training and ACE offers, as stipulated under section 253 of the Education Act 1989, which provides a state of confidence based on the judgement of independent systematic evaluations (ITPQuality, 2010). This state of confidence is given across two criteria: The organisation's education performance and its capability in self-assessment.

> Educational Performance: *"is the extent to which the educational outcomes achieved represent quality and value for learners and other stakeholders. An evaluation of education performance involves answering questions focused primarily on the quality of learning and teaching, and the achievements of learners"* (ITPQuality, 2010, p.4).

> Capability in Self-Assessment: *"is the extent to which self-assessment information is used to understand performance and bring about improvement. It reflects the extent to which an organisation effectively manages its accountability and improvement responsibilities"* (ITPQuality, 2010, p.4).

If a taxonomic view is taken, based on House's (1980) major approaches to evaluations, the EER would be considered within the scope of the Behavioural Objective, although with the range of key evaluation questions there is scope for qualitative results, of primary consideration is the quantifiable data such as student completion and retention rates. As such, the EER process seeks to quantify outcome variables, drawing on questions for instance as 'How well do learners achieve?' and 'How effective is the teaching?' In this regard, the focus is on the productivity and accountability of programmes within the educational organisation and with it comes the academic politics inherent to the polytechnic and private training sector. With the identification of productivity and accountability as potential outcomes of the evaluation process, the rationale behind educational evaluations starts to become clear. Although it cannot be explicitly stated, the identification of successful outcomes of tertiary programmes and organisational accountability is viewed as the principal rationale for the EER process.

The Need to Rethink Quality

In 2014, a presentation given (Pace, 2014) as part of the New Zealand Qualifications Authorities Strategic Development Series indicated that the concept of 'quality' within the polytechnic and private training sector needed to be reconsidered. Pace argued that it was unclear what was meant by 'quality' within

the polytechnic and private training sector environment and if it was unclear what ‘quality’ was, how could it be measured? This echoed Pace’s (2012a, 2012b, 2012c) earlier work suggesting that a philosophical approach was required to better understand not only ‘what’ quality is, but ‘that’ quality is.

Chautauqua Two

Actors:
Mùrén, Programme Manager, Head of School, Committee Member One, Committee Member Two

Because of Mùrén ‘interest’ into the quality of academic resources he was ‘nominated’ to become a member of the Programmes Approach Committee for the institution. This committee was run by the institution’s Academic Quality Unit and met monthly to approve the development and delivery of new programmes and the topics which contributed to those programmes, both core and elective topics. The committee also covered academic misconduct and the ratification of results at end of each teaching semester.

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The programme manager presented the end of semester results for a second-year degree paper. The assessment for this particular degree paper had been readjusted from the previous year and now was assessed completely through internal assignments: two essays and a case study, where it had previously had an end of semester exam worth 50% of the total grade.

> Programme Manager: “I am pleased to say that all students in this paper have received an ‘A’ grade.”
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Committee Member One: “That is impressive.”

Committee Member Two: “How many students were in the class?”

Programme Manager: “32 students.”

Committee Member Two: “32 students got an ‘A’?”

Programme Manager: “Yes.”

Having taken some psychology and psychometric assessment, the notion of the bell curve came to mind, which Mùrén scribbled on a piece of paper in front of him, along with the words of one of his university professors “If a test is designed well it will fit the bell curve perfectly, which means only half the class shall pass.” This was Mùrén’s professor’s motto and in his class, you knew that half the class would fail. Although Mùrén did not entirely support this theory, he did wonder about a 100% student pass rate, particularly when all the students received an ‘A’ grade.

Head of School: “Have you got an assessment breakdown showing the grades given for each student?”

Programme Manager: “Certainly.”

The Programme Manager proceeded to hand out copies of the student grade sheet for this paper. This raised several questions. How and why did all the students receive the same grade, on each piece of assessment? Did the percentage reflect an ‘A’ grade? What was the marking criterion of the assessment? It seemed that Mùrén was not the only one who had such questions.

Head of School: “How did the students all get the same marks for all assessments?”

Programme Manager: “All the students appear to have grasped the material well, [the lecturer] has done a very good job indeed.”

Head of School: “Has moderation occurred for the course?”

Programme Manager: “Yes, I believe it has.”

After some further discussion the results were ratified, and all 32 students received an ‘A’ grade with 81%. But Mùrén was still left wondering, was this a ‘good’ course? Had the lecturer indeed done an excellent job in delivering and assessing the course material or was there something else? Did an ‘A’ or and ‘A+’ really represent a high-quality programme?

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Sometime later, quite by chance, Mùrén found out that this course had received excellent student feedback, with the students praising both the course and the lecturer. From a quality perspective, high levels of customer satisfaction are an indicator of quality. Maybe this was truly a high-quality course: all the students passed, and the lecture received positive reviews.

Chautauqua Three

Actors:
Mùrén, Colleague One, Head of School, Dean

During Mùrén’s time as an academic he had on occasion been asked to investigate suspected plagiarism for student works, as most teachers in the post-secondary educational would have, at some point in their career. One such occurrence was brought to his attention when a fellow academic came to him with concerns over a group presentation which they had just watched. The assessment, a group
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presentation, was worth 40% of the grade for the paper he was teaching and was the last of three pieces of work the students were to complete.

Colleague One: “Mùrén can you help me?”

Mùrén: “Sure thing, how can I help?”

Colleague One: “I’ve just had my students deliver their group presentations and one seemed, well, ‘odd’ to me.”

Mùrén: “What do you mean ‘odd’?”

Colleague One: “Well, it did not flow, it felt like it had been produced by two sets of people.”

Presentations are difficult to get a ‘second opinion’ on, however in this case each presentation had been videoed, so they were able to simply review the presentation in question. They sat down together and watched the group presentation. It started off a bit rough, as most presentations do, particularly student presentations, but then it seemed to pick up. It was well articulated, well-structured arguments and discussions, even if the presenters were reading the material. But then again how few of us actually memorise whole speeches.

Mùrén: “This is quite good. What’s ‘odd’ about it?”

Colleague One: “Keep watching.”

Following on for what turned out to be a fantastic body of the presentation came the conclusion, and the roughness they had seen at the start was back again. How did the presentation go from a logical and formal arrangement to this disorganised and weak conclusion?

Mùrén: “You are right, that is odd, and it does seem like the work of two different groups.”

Mùrén watched it again, more closely this time. The difference in style, language and how the arguments were constructed changed significantly between the introduction, the body of the presentation and its conclusion. It was like watching a student presentation with a conference presentation in the middle of it. As it was a presentation and the students were not required to hand in their presentation notes, they were unable to use any of the standard plagiarism software, so they ‘googled’ a couple of the lines from the body of the presentation. What they discovered was an exact copy of the student’s presentation, from a conference three years prior. The conference presentation had been transcribed and was online. About 80% of the student’s presentation had come from this conference transcript: word for word, and clearly indicated why there was such a difference within the students work and why Mùrén’s fellow academic had had concerns.

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Following on from the discovery, Mùrén’s colleague started to follow the procedure for academic misconduct, which involved the Head of School, the Programme Manager and the four students involved. All four students denied any form of academic misconduct, stating the work was 100% their own. Considering the evidence provided, the Head of School in conjunction with the Academic Quality Unit deemed that this was indeed a case of academic misconduct and all four students received a ‘Fail’ grade for the paper.

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At this point you may well be wondering why this chautauqua is being told and what relevance does it have to quality? Surely the process has shown a mechanism for upholding educational standards?

Following the outcome of the meeting between the students and respective staff, the four students lodged an appeal with the Dean demanding the decision be overturned and for them to receive appropriate grade for their presentation. As part of this appeal they stated that they had paid for the paper and therefore should receive the services and products pertaining to it, in this case a 'Pass'. A bit like getting a replacement phone if yours stops working under warranty. But in education there is no such warrant, if you don't meet the academic criterion or break the rules you are not going to pass.

For whatever reason the ruling was overturned by the Dean and all four students passed the paper with a –B/B average.

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This does raise a series of questions pertaining to this event and the quality and value of academic study in the wider context. Is education a service or product which is purchased? If so, what are the services being offered and what is the product? Is the product the certificate or diploma received? Is the product a more learned individual?

Chapter Summary

The first image depicts the ox herder searching for his lost ox. Koller (2016) offers the interpretation for the first image that the ox herder is dissatisfied with his life and had been unable to find the happiness that he is looking for. Although he has prosperity and is renowned by his peers, he has not found the
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fulfilment that he is seeking. Koller continued on to suggest that although the ox herder is seeking something, he is unclear as to what it is he is seeking, or what it is that will bring him meaning and fulfilment.

The focus of the thesis is a philosophical investigation of quality within the polytechnic and private training sector, or the search for what quality is within the context of the polytechnic and private training sector environment with a focus on the New Zealand polytechnic sector. Through the first Chautauqua Mùrén is exposed to one element of quality in the polytechnic and private training sector, primarily the quality of the physical resources used. Although superficial in its nature, the quality of resources and teaching materials can be viewed as an indicator of wider quality considerations.

Chapter Two: Quality Management Systems

(van den Dungen, 2016, p. 17)

II. Discovering the Footprints

Along the riverbank under the trees,
I discover footprints.
Even under the fragrant grass,
I see his prints.
Deep in remote mountains they are found.
These traces can no more be hidden
than one's nose, looking heavenward.

(Koller, 2016, p.3)

In this chapter I will offer an historical overview for the evolution of Quality Management from the late 1800s where inspections were at the fore and the influential work of Frederick Taylor was forging new ground, through to current practices under the business excellence paradigm and the works of Malcolm Baldrige and Noriaki Kano. This will be achieved through the exploration of different quality eras: Inspection, Quality control, Quality Assurance and Total Quality Management and discuss the contributions of quality gurus who have contributed to the conceptualisation, development and application for the transformation of quality management. Once I have established the path which the evolution of quality management has taken, I will provide evidence to show how quality and evaluative practices in education have followed the same path.

Birth of Quality

Concern for quality is not new, with evidence throughout the history of organised production and industry. One of the earliest examples can be seen in the Babylonia's Code of Hammurabi, where rule 229 states 'If a builder build a house for someone, and does not construct it properly, and the house which he built falls in and kills its owner, then that builder shall be put to death' (Simpson, 2013). Further evidence of measurement and inspection can able seen in the archives of Egypt and with King John of England's appointment of an inspector to report on the construction and repair of ships (Davis, 2003). One of the earliest documented records of quality control being on the 8th May 1382 where a merchant, John Welburgham of Canterbury, was fined six pence for selling two cooked fish that were 'rotten and stinking and unwholesome', this fine was imposed by the Mayor after six citizens laid complaints. Historical information surrounding the evolution and importance of quality becomes clearer in the late middle ages where the Guilds

used special measures to inspect the work of apprentices to guard the Guild against claims of makeshift or poor workmanship. As such, the Guild assumed responsibility for quality control of their members through setting and maintaining certain standards for guild membership. The Guild standards included the utilisation of variation minimisation, continuous improvement to product detail and life cycle integration to ensure the position of the Guild and the interests of the people and its members (Wolek, 1999). The intention was to ensure that apprentices and craftsman did not lower the standards of their products, which would reflect negatively on the Guild.

This introductory paragraph highlights the historical depths to which the concern for quality can be found. It is the purpose of this chapter to offer an overview of the evolution of quality from the concept of inspections, through Quality Control and Quality Assurance to the view of Total Quality Management. In order to achieve this objective Garvin's (1988) model of quality evolution will be utilised and expanded upon to encapsulate the current quality methodological approach of Business Excellence. Additionally, the shortcomings identified within Garvin's model will be addressed primarily through including a quality genealogy covering the most predominant individuals who have played a role in shaping quality methodology, theory and practice.

Model of Quality Evolution

Over the past decades there has been a rapid evolution of quality management where simple inspection has been replaced by, or complemented with, quality control and quality assurance, through to the approach of total quality management. The evolutionary process can be grouped into four discrete stages: inspection, quality control, quality assurance, and total quality management, with

most quality theorists accepting Gavin's (1988) model of quality evolution (Dahlgaard, 1999).

Figure 2. Garvin's Model of Quality Evolution

Evaluative research conducted on Garvin's Model has identified three critical factors for reflection (Dahlgaard, 1999). In order to identify and minimise these identified limitations each point will be examined further. These are:

1. The model is only appropriate for explaining US and other Western countries in general.
2. The four stages are primarily focused on technical aspects of the quality movement.
3. The model is viewed as a potential threat to the quality philosophy.

The first point is explained through the examination of the literature which explores the quality evolutionary history of Eastern countries, principally Japan. The works of Dahlgaard and Larson (1990, 1992) detail the three phases of the evolution of quality in Japan. The first phase being viewed as importing/adoption/learning which occurred through the mid 1940's to the early 1960's; the second phase seen as digesting/implementing/adaption from the early 1960's to the 1970's; and then the third phase viewed as mastery and the further development and 'export' of quality management to other countries from the early 1970's up to 1990's. This pattern is defined with focus on a learning paradigm, unlike the technical aspects considered in the Western approach as defined by Garvin. This can then be linked to the second criticism of Garvin's model.

Figure 3. Evolutionary Stages of Quality in Japan

The second point for examination stems from the first with respect to the focus of the four stages. Gavin's model focuses on the technical aspects of quality management. If the focus is shifted to a general management, learning or sociological point of view, the model no longer applies. This can in effect be overcome by the consideration of these factors within the model itself.

The third criticism of Garvin's model is its perceived threat to the quality philosophy. The structure of the model is viewed as limiting, with some of the early publications of the quality founders being excluded and as such some of the basic underlying philosophies and principles are missing (Costin, 1994). The argument provided by Costin (1994) suggests that the evolutionary history of quality can be divided into two dimensions: the evolutionary history of the implementation of quality, and the evolutionary history of the conceptual development of quality. Dahlgaard (1999) views this argument as a gap in time between the exploration of the conceptual theories and practical application of those theories. However, due to the interaction between the two suggested evolutionary processes and their support of each other, they cannot be easily divided.

Taking these criticisms into consideration, the following needs to be pointed out in order to increase the assurance that this model is appropriate to the current context. New Zealand's own evolutionary history, which is discussed later in this chapter, reflects the Western and American quality journey. As such, it is appropriate to discuss the evolutionary history of quality using Garvin's four stages

and a foundation which will be enhanced upon. To overcome the perceived threats to the quality philosophy as identified by Costin (1994), each stage of evolutionary development discussed in this chapter will be complemented with a genealogy of those individuals identified as contributing to the conceptualisation and application of quality systems.

Inspection

As mass production increased, so too did the need for increasing numbers of inspectors, in order to maintain reasonable quality. Under an inspection-based system one or more characteristics of the product or services are measured, assessed or tested to ensure that it complies with the predetermined requirements specified. Cortada and Woods (1995) defined inspections as "the act of measuring, testing, examining, or gauging one or more characteristics of the outputs of a process and then comparing the results to specified requirements" (p. 186).

Figure 4. Garvin's Evolutionary Model of Quality - Inspection

Whilst there are numerous methods and implements for performing inspections, the discipline can be divided into two schools of thought (Cortada & Woods, 1995). The first, more traditional, approach is one in which the company undertakes inspections on products after items leave the production line, or on services after the service is performed. The second approach undertakes inspections throughout the production process, from beginning to end. This is the more promoted of the two schools of thought by most quality experts (Cortada & Woods, 1995). The objective with the second approach is to eliminate process problems that result in the defective product as it occurs, rather than waiting until the end of the

process. This early identification is viewed as a financial saving exercise. In both approaches, either a sample or 100 per cent inspection methods can be utilised. Within a sample inspection, a given sample of items within a given lot is inspected, as compared to the case of the 100 per cent inspection approach where all items within a given lot are inspected. This method can also be referred to as a screening inspection (Cortada & Woods, 1995).

One of the earliest pioneers, within the contemporary history of quality management is Frederick W. Taylor (March 1856 – March 1915). Taylor was an American engineer who sought to improve industrial efficiency and is often referred to as the father of scientific management following his 1911 publication, *The Principles of Scientific Management*. In this text, Taylor identified four key principles:

1. Replace rule-of-thumb work methods based on a scientific study of the tasks,
2. Scientifically select, train, and develop each employee rather than passively leaving them to train themselves,
3. Provide detailed instruction and supervision of each worker in the performance of that worker's discrete task,
4. Divide work nearly equally between managers and workers, so that managers apply scientific management principles to planning the work and the workers actually perform the tasks.

What can be seen in Taylor's key principles is the application of the inspection method or as Taylor puts it "in the past the man has been first; in the future the system must be first" (1911, IV). Principle three is the clearest example of the inspection methodology with the second inspection approach being utilised.

Although largely viewed as the founder of quality management systems as we currently know them, Taylor's work has received a degree of criticism. Mintzberg (1989), a management theorist stated that Taylor's obsession with efficiency allows measurement benefits to overshadow the less quantifiable social benefits. The earlier work of Braverman (1974) echoes a similar line of criticism but from a socialist intellectual perspective. In both cases it is important to consider the 80-year gap between the original work and the criticisms being made, with particular reference to the changes in the social perception of the workforce.

Quality Control

Quality control is described as the development, design, production, marketing of a product or services with optimal cost-efficiency and usefulness with which customers are satisfied (Cortada & Woods, 1995). The term quality control refers to "those activities a company and its employees undertake to ensure that organisational processes deliver high-quality products and services (Cortada & Woods, 1995, p. 289). Quality control relies on post-production inspection, similar to that described under inspection as the first school of thought.

Figure 5. Garvin's Evolutionary Model of Quality - Quality Control

One of the key methods in quality control is the use of statistical sampling, operating characteristic curves and tables for acceptable quality (Davies, 2003). Such techniques were encompassed in the works of Walter A. Shewhart, and his mathematical approach to quality.

Walter A. Shewhart (March 1891 – March 1967) was an American physicist, engineer and statistician who held a Doctoral degree in physics from the University of California. As Taylor was referred to as the father of scientific management, Shewhart is referred to as the father of statistical quality control. Shewhart worked at Western Electric and Bell Telephone Laboratories as an engineer, later becoming actively involved with the National Research Council and the International Statistical Institute and went on to become the first honorary member of the American Society for Quality (QP Staff, 2010).

The work of Shewhart resulted in the development of the control chart and statistical control by carefully designed experiments. The basic principles of quality control were first described in the landmark text *Economic control of quality of manufactured products* (1931). The control chart provided a simple, yet highly effective method for securing economic control, and signalled the formulation of a scientific approach to product development and management. Later, Shewhart seminal work *Statistical methods from the viewpoint of quality control* (1939) provided discussion for a problem solving approach to quality improvement, which would come to be known widely in an array of disciplines as the Plan-Do-Study-Act cycle; also known as Shewhart Cycles or the abbreviation PDSA. Deming subsequently developed a variation on the PDSA cycle, which would come to be known as Deming Cycle (Plan-Do-Check-Act or the abbreviation PDCA).

William Edwards Deming (October 1900 – December 1993) is best known for his work in Japan, was an American statistician and consultant. Deming published a number of works including *Quality, productivity and competitive position* (1982) which début his 14 principles for management. The 14 principles

for management were later revised to form the foundation of his landmark text *Out of the crisis* in 1986. These principles are presented in the table below.

Table 2. Deming 14 Principles for Management

Deming 14 Principles for Management (Deming, 2000, pp. 23-24)	
1.	Create constancy of purpose toward improvement of product and services, with the aim to become competitive, to stay in business and to provide jobs
2.	Adopt the new philosophy. We are in a new economic age. Western management must awaken to the challenges, must learn their responsibilities, and take on leadership for change.
3.	Cease dependence on inspection to achieve quality. Eliminate the need for massive inspection by building quality into the product in the first place.
4.	End the practice of awarding business on the basis of a price tag. Instead, minimise total cost. Most towards a single supplier for any one item, on a long-term relationship of loyalty and trust.
5.	Improve constantly and forever the system of production and service, to improve quality and productivity, and thus constantly decrease costs.
6.	Institute training on the job.
7.	Institute leadership. The aim of supervision should be to help people and machines and gadgets do a better job. Supervision of management is in need of overhaul, as well as supervision of production workers.
8.	Drive out fear, so that everyone may work effectively for the company.
9.	Break down barriers between departments. People in research, design, sales, and production must work as a team, in order to foresee problems of production and usage that maybe encountered with the product or service.
10.	Eliminate slogans, exhortations and targets for work force asking for zero defects and new levels of productivity. Such exhortations only create adversarial relationships, as the bulk of the causes of low quality and low productivity belong to the system and thus lie beyond that power of the work force: a. Eliminate work standards (quotas) on the factory floor. Substitute with leadership. b. Eliminate management by objective. Eliminate management by numbers and numerical goals. Instead substitute with leadership.
11.	Remove barriers that rob the hourly worker of his right to pride of workmanship. The responsibility of supervisors must be changed from sheer numbers to quality.
12.	Remove barriers that rob people in management and in engineering of their right to pride of workmanship. This means among other things the abolishment of the annual or merit rating and of management by objectives.
13.	Institute a vigorous programme of education and self-improvement.
14.	Put everybody in the company to work to accomplish the transformation. The transformation is everyone's job.

At this time consideration can be given to the Eastern approach to quality and its influence on the evolution of quality. Deming's work was the result of the

Japanese not only embracing the teaching of the Western quality ‘gurus’, but also saw the expansion of the methodologies to what would become enduring concepts. The most predominant of these concepts is Kaizen and its underpinning philosophy. Originally developed and applied within the Japanese industries, Kaizen would go on to become a core component to the later developed Total Quality Management approach and the concept of ‘lean manufacturing’. While the Kaizen approach is designed to analyse systems to find opportunities for improvement, most importantly, it is to be viewed as a philosophy to embedding value and as such be considered as alive rather than imposed. According to a white paper by PP&S (2016) Kaizen comprises of the following key concepts.

- Every is the key word in Kaizen. Improving *every*thing that *every*one does in *every* aspect of the organisation in *every* department, *every* minute of *every* day.
- Evolution rather than revolution.
- Everyone involved in a process or activity, however apparently insignificant, has valuable knowledge and participates in the working team.
- Everyone is to participate, analysing, providing feedback and suggesting improvements to their area of work.
- Every employee is involved in the running of the company and is trained and informed about the company, fostering commitment, interest and job satisfaction.

Joseph Moses Juran (December 1904 – February 2008) was a management consultant who specialised in quality and quality management, having been quoted as saying "I contributed to a new science, managing for quality" (Phillips-Donaldson, 2004). Juran's application of Presto Charts, or the 80-20 rule, suggested that 80% of quality issues are caused by 20% of causes and as such management should focus on the 20%. Moreover, he developed the Juran Trilogy which outlined three required features for the management of quality; planning, control and improvement, as shown in the figure below. In addition to the 'tools' and 'philosophies' developed by Juran, consideration also needs to be given to the change of focus which he provided to the perception of quality. Juran added the human dimension to quality management, where focus was not only given to the statistical side but encompassed the human side of quality also (QP Staff, 2010). This holistic view of quality, combined with the 1951 publications of the seminal text *Quality control handbook* lead to Juran becoming an authority on quality and a highly sought after consultant, lecturer and leader in quality management.

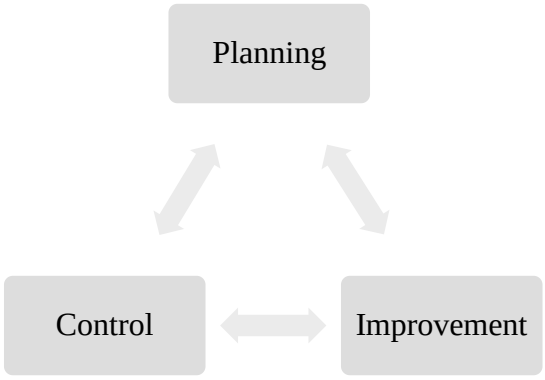

Figure 6. Juran's Trilogy

Philip Bayard Crosby (June 1926 – August 2001) is held in high regard in business circles as a quality management guru best known for stressing the

importance of ‘doing it right the first time’. This included four major principles or the four absolutes of quality:

1. The definition of quality is conformance to requirements
2. The system of quality is prevention
3. The performance standard is zero defects
4. The measurement of quality is the price of non-conformance

Crosby’s 14 step approach to improvement and his four absolutes of quality are well articulated in his 1979 text *Quality is free: The art of making quality certain* and his later publication *Quality without tears: The art of hassle-free management* (1984). These steps are provided in the table below as identified in Oakland’s (2003) text.

Table 3. Crosby's 14 Steps for Management

Crosby 14 Steps for Management	
1.	Make it clear that management is committed to quality.
2.	Set up quality improvement teams with representative of the team drawn from each department.
3.	Identify where current and potential non-conformance problems come from.
4.	Evaluate the cost of quality and explain its use as a management tool.
5.	Raise the quality awareness and personal concern of all employees.
6.	Take actions to correct problems identified through previous steps.
7.	Establish a committee for the zero defects programme.
8.	Train supervisors to actively carry out their part of the quality improvement programme
9.	Hold a ‘zero defects day’ to let all employees realise that there has been a change
10.	Encourage individuals to establish improvement goals for themselves and their groups
11.	Encourage employees to communicate to management the obstacles they face in attaining their improvement goals.
12.	Recognise and appreciate those who participate.
13.	Establish quality councils to communicate on a regular basis.
14.	Do it all over again to emphasize that the quality improvement programme is never ends.

The concept of Zero defects, Crosby’s third absolute for quality, has been defined as a management tool aimed at the reduction of defects through prevention

and is tailored to motivate workers to prevent mistakes by developing a constant, conscious desire to do their job right the first time (Halpin, 1966). In the later years Crosby paid particular attention to the role of management in creating a quality-focused organisation, with an emphasis on team work.

Kaoru Ishikawa (July 1915 – April 1989), creator of the Ishikawa or cause and effect diagram (also referred as the fishbone diagram) for which his is best known, was also a prolific scholar publishing 627 articles and 31 books (QP Staff, 2010). Like the work of Crosby, Ishikawa also placed considerable focus on the human element of quality management. His effects in this domain saw the establishment of the Ishikawa Medal by the American Society for Quality in 1993. This Medal is awarded annually to recognised individuals, or teams, whose work impacts positively on the human side of quality.

Quality Assurance

Quality assurance can be viewed as the linkage between quality control and total quality management. The two key principles in Quality Assurance “fit for purpose” and “right first time” can be drawn from the work of Deming with his 14 principles for management, and Crosby’s work regarding the concept of zero defects. It extends beyond the control function seen in Quality Control to incorporate elements of planning and improvement with the intention of managing quality of outcomes through management of organisational processes that impacted on the outcomes (Grigg, 2011). This marks a significant shift in the methods of managing quality primarily by treating quality as an organisation wide responsibility and not solely in the sphere of quality specialists.

Figure 7. Garvin's Evolutionary Model of Quality - Quality Assurance

In its simplest form quality assurance can be viewed as:

- Having a focus on building quality into processes to prevent quality problems in products and/or services,
- Involving monitoring and managing processes and product to ensure quality, this may include the use of inspections and quality control,
- Occurring during every stage in all of the organisation's processes from design to delivery, and
- Placing responsibility for quality with everyone within an organisation (Grigg, 2011).

As with the other evolutionary changes within the development of approaches to quality, quality assurance has been the subject of significant criticism. The focus of this criticism has been twofold: firstly, that quality assurance is robustly entrenched in the same tradition as inspection and quality control, in that its focus is primarily on the technical process elements of an organisation and does not fully reflect the significances of the human element. Secondly, it has been promoted as a solution for all organisational problems when it should be viewed as a tool for organisational interventions and problem solving.

Total Quality Management

The evolutionary step of total quality management starts with Armand Feigenbaum's concept of total quality control which he has continued to shape over the past 60 years following the 1961 publication of *Total quality control*; which was

originally titled *Quality control: Principles, practice and administration* based on his earlier publications and programmes. Total quality control is a "system used to integrate quality development maintenance and improvement of all parts of an organisation" (Cortada & Woods, 1995, p. 352). The objective of total quality control was to guarantee the delivery of quality outputs to customers through the implementation of a comprehensive set of organisational actions. Due to the very nature of the approach, the most effective way to implement the action was through the organisational management structure. This moved total quality control to total quality management and completed this evolutionary step.

Figure 8. Garvin's Evolutionary Model of Quality - Total Quality Management

Total quality management has several definitions; however, the common trend which binds them is a "set of management practices designed to continuously improve the performance of organisational processes" (Cortada & Woods, 1995, p. 353) for both profitability and customer satisfaction. As total quality management grew out of total quality control, all the organisation's activities and actions need to be integrated to achieve its overarching objective. Costin (1994) provides a definition which reflects the interplay between three fields and approaches:

1. Efficiency concerns rooted in process analysis, related to such traditions as process engineering, operations management, operations research and statistical process control.
2. Issues which are related to the human relation schools of management and the fields of organisational behaviour and organisational dynamics.

3. Issues which are related to the field of strategic management (p.4).

Business Excellence

The late 1970's and early 1980's saw the development of quality awards and business excellence with many countries introducing quality frameworks based on the Baldrige or European Foundation for Quality Management (EFQM). A large number of organisations integrated these frameworks primarily as a method of conducting internal self-assessments and for the introduction of organisation wide quality management, with the awards process being only secondary to the adoption of the framework. This resulted in very few organisations applying for awards (Brown, 2013). By the end of the 2000s the new term 'business excellence' was favoured over quality, with the Baldrige award dropping the word quality from its documentation (Brown, 2013).

Figure 9. Enhancement of Garvin's Original Model of Quality Evaluation to include Business Excellence

Malcolm Baldrige (October 1922 – July 1987) who was the 26th United States Secretary of Commerce, helped to draft an early version of the Quality Improvement Act. Due to his involvement within the quality movement, US Congress named the annual award for product quality in his honour: the Malcolm Baldrige National Quality Award, more commonly known as the Baldrige Award for Performance Excellence.

The concept of excellence is heavily grounded with continuous improvement similar to its integrating with total quality management. H. James

Harrington is considered an international performance improvement expert having developed many concepts including poor-quality cost, total improvement management and the business process improvement model. He has authored over 35 books and created 10 software packages for performance improvement. In 2010 he was named “The Global Leader in Performance Improvement Initiatives”. One of his more popular concepts is the Business Process Improvement (BPI) mode which is a systematic approach to help an organisation optimise its underlying process to achieve more efficient results.

Along similar lines to Harrington there is the Japanese industrial engineering Shigeo Shingo (1909 – 1990) who was considered as the world’s leading expert on manufacturing practises, he is commonly recognised as creating the Toyota Production System; however, a more actual account would be that he documented the system. The main objective of the Toyota Production System is to out design overburden, inconsistency and waste, with seven types of waste having been identified and addressed.

1. Waste of over production (largest waste)
2. Waste of time on handling (waiting)
3. Waste of transport
4. Waste of processing itself
5. Waste of stock at hand
6. Waste of movement
7. Waste of making defective products

Additionally, Shingo has strong associations with ‘Just in time’ practices and the ‘pull’ production system.

Revising the Model of Quality Evolution

Having explored the evolution of quality from a historical and genealogical standpoint, consideration can now be given to revising the model to include contemporary practice. What is shown in the figure below is Gavin's (1988) model with inclusion of business excellence methodology, aligning it to current practice methodology. To overcome some of the criticisms of Gavin's (1988) model for the evolution of quality additional enhancements have been added. Each of which will be discussed in turn.

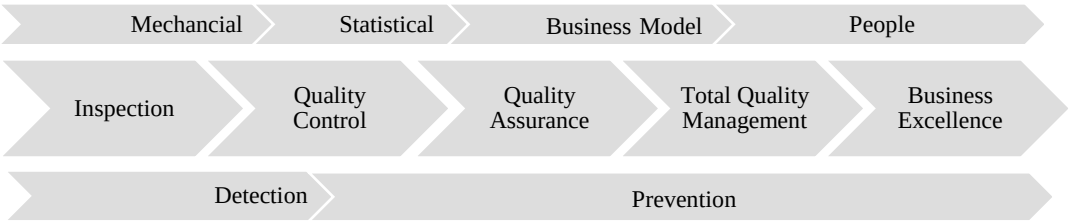

Figure 10. Revised Model for the Evolution of Quality

The first enhancement added, to the top of the model, is the additional overlay which reflects the progression from a mechanical system to one which includes a humanistic component. This enhancement is directly targeted at the second criticism identified by Dahlgaard (1999), that the four stages of the model primarily reflected the technical aspects of a quality movement. The revised model now reflects evolutionary steps which quality systems have undertaken, as it has moved from a mechanical through to a statistical approach, followed by business modelling and resulting in the contemporary focus which places people at the centre of the quality management universe. If consideration is given to the genealogy behind quality management, it is clear to see the influence that various individuals have had on the evolutionary development of quality management and it has progressed from solely a mechanical approach to one which focuses on the

individual. This is reflected in the expanded version of the revised model which shows how each individual discussed within this chapter has contributed to the growth and improvement of quality management systems.

The second enhancement, which has been added to the bottom of the model, reflects the movement from a detection base approach to a preventative one. This enhancement has been included to directly tackle Dahlgaard (1999) third criticism, that the original model was a potential threat to the quality philosophy. As suggested by Costin (1994), the structure of the original model was limited and potentially missed some of the underlying philosophies which had guided the development of quality management practices. Costin (1994) also states that the evolutionary history of quality management could be divided into two dimensions, these being the conceptual development of quality and the implementation of quality practises. Dahlegaard (1999) viewed this potential division as a gap in time rather than philosophical understanding. Additionally, due to the interactive nature of conceptual development and implementation the two cannot easily be divided. To overcome this issue, the underlying philosophical practice has been grouped into what has been perceived as their fundamental objective. Taking this approach, inspection and quality control are viewed as methods of detection whereby, any quality issues identified at the end of the process; quality assurance, total quality management, and business excellence are reviewed as preventative methodologies whereby quality issues identified early are prevented.

Chapter Summary

The second image depicts the ox herder finding the tracks of the ox, showing hope that the ox has not been lost forever. Koller (2016) offers an interpretation for this image rooted in the teachings of Buddhism. Koller suggests

that the ox herder recognises his own distress and starts to seek out a solution, even though he is unclear which path to follow.

This chapter has provided the necessary historical background and evolutionary development of quality to allow for the contextualisation of quality within the the polytechnic and private training sector. Further, what has been proposed as an extension of Gavin's Evolutionary model of quality to allow for the inclusion of current theoretical and practical approached to quality: Business Excellence. What is evident from the discussion of the Quality gurus is the noticeable absence in any attempt to address what 'quality' actually is in terms of existence within physical presence, or put in other terms, that quality is a thing within the context of our reality. A lesser known quality guru, Robert Pirsig, addresses this issue, and it is his works which will form the foundation to this thesis.

Chapter Three: Pirsig and his Metaphysics of Quality

(van den Dungen, 2016, p. 22)

III. Perceiving the Bull

I hear the song of the
nightingale.
The sun is warm, the wind is
mild,
willows are green along the
shore –
Here no bull can hide!
What artist can draw that
massive head,
those majestic horns?
(Koller, 2016, p.4)

(van den Dungen, 2016, p. 26)

IV. Catching the Bull

I seize him with a terrific
struggle.
His great will and power
are inexhaustible.
He charges to the high plateau
far above the cloud-mists,
Or in an impenetrable ravine he
stands
(Koller, 2016, p.4)

The focus of this chapter is on Robert Pirsig and the development of his Metaphysics of Quality. To achieve this an exploration will be given to Pirsig's mental state and his alternative persona as the relationship between Pirsig and Phaedrus parallel and emphasis his struggle in coming to terms, in his own mind, with Quality. Pirsig's mental state will be viewed in terms of the diagnosis he received, followed by a differential diagnosis which the author believes meets the description given in both *Zen and the Art of Motorcycle Maintenance* and *Lila.* The newly proposed diagnosis also offers itself as a reflection of Pirsig dialectic model of Quality. Following this analysis, Pirsig's 'definition' of Quality will be examined in terms of his essential points which conceptualise his perspective of Quality. Once the essential points have been articulated, his metaphysical model of Quality will be detailed and analysed. This analysis will conclude with linkages back to the polytechnic and private training sector.

The principal premise within this chapter builds on Premise One and Premise Two presented in Chapter One:

There is no clear definition of quality in the context of education, with several authors stating that quality is difficult to define. Pirsig offers an alternative description for quality from a metaphysical perspective which can be applied to the educational environment, if quality exists. Pirsig **metaphysics of quality** is grounded in Plato's 'Theory of Form' and can be extended by Aristotle's *Metaphysics* and Kent's philosophical works given in his *Critique of Pure Reason*.

This allows for the following conclusion to be drawn:

Therefore, as the current model of tertiary education evaluation and review is based on quality assurance, and this approach is focused on the quality of a product rather than on the value of the ‘something’, then a new view of quality where it applies to the polytechnic and private training sector is needed. To undertake a new view of quality it needs to be determined that there exists such a thing, which is known as ‘quality’.

The Mental Illness of Pirsig

Pirsig suffered a nervous breakdown and spent time in and out of psychiatric hospitals between 1961 and 1963. He was diagnosed with paranoid schizophrenia and clinical depression as a result of an evaluation conducted by psychoanalysts, and was treated with electroconvulsive therapy on numerous occasions, a treatment he discusses in his novel, *Zen and the Art of Motorcycle Maintenance*. Taking the premise that it is a direct correlation between Pirsig’s mental illness and the manifestation of Phaedrus, as is suggested in the literature through the strong connection that Phaedrus has with Pirsig’s intellectual struggle with the concept of quality and his hospitalisation resulting from this struggle, the assumption is drawn that Phaedrus is a delusional contract.

> *“There is a divided personality here: two minds fighting for the same body, a condition that inspired the original meaning of ‘schizophrenia’.”* (Pirsig, 1974, p. xiv)

Diagnosis

Schizophrenia is one of the most severe and disabling mental illnesses, characterized by extreme disruptions of perceptions, thoughts, emotion and behaviours (Ettinger, Crook & Stein, 1994). Schizophrenia is distinguished from

other mental illnesses primarily based on the characteristically extreme disturbances in thinking that cause individuals to behave in a maladaptive manner. The American Psychiatric Associations Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR) (2000) provides criteria for the diagnosis of mental illness, although appreciation is given to the fact that the DSM-I (1952) was in use at the time of Pirsig's diagnosis the discussion provided here will be based on DSM-IV-TR (2000).

Delusions (Criterion A1, Table1) are erroneous beliefs that usually involve the misinterpretation of perceptions of experiences. In the case of Phaedrus, it could be inferred through the text that he was merely a delusional construct within a fictional environment. However, the level of complexity, his interactions with others and the way Pirsig refers to him in the third person does not support this inference. If delusions are not present, consideration then needs to be given to the second diagnostic criterion A2: Hallucinations.

Hallucinations (Criterion A2, Table 1) may occur in any sensory modality (auditory, visual, olfactory, gustatory, and tactile) as an experience in the absence of any stimulation from the environment. Of these modalities, auditory hallucinations are the most frequent presentation, usually experienced as voices either familiar or unfamiliar. Despite the diagnostic criterion stating that two or more of the symptoms under Criterion A (Table 1) are required for a diagnosis if delusions are bizarre or hallucination involves voices commenting or voices engaged in conversation then only one is required. It is plausible within the context of *Zen and the Art of Motorcycle Maintenance* that Phaedrus was the manifestation of an auditory hallucination, in which Criterion A would have been

met. However, this does not explain the depth of the character and his interactions with the environment and those around him.

Table 4. Diagnostic Criteria for Schizophrenia (DSM-IV-TR)

Diagnostic criteria for Schizophrenia (295)

A. Characteristic symptoms: two (or more) of the following, each present for a significant portion of time during a 1-month period.
    1) Delusions
    2) Hallucinations
    3) Disorganised speech
    4) Grossly disorganised or catatonic behaviour
    5) Negative symptoms i.e. affective flattening
B. Social/Occupational Dysfunction: For a significant portion of the time since the onset of the disturbance, one or more major areas of functioning such as work, interpersonal relations, or self-care
C. Duration: Continuous signs of the disturbance persist for at least 6 months. This 6-month period must include at least 1 month of symptoms that meet Criterion A.
D. Schizoaffective and Mood Disorder Exclusion: Schizoaffective and Mood Disorder have been ruled out because either (1) no Major depressive, Manic or Mixed Episode have occurred concurrently with the active phase of the symptoms; or (2) if mood episode have occurred during the active phase their total duration has been brief.
E. Substance/General Medical Condition Exclusion: The disturbance is not due to the effects of substance or a general medical condition.
F. Relationship to a Pervasive Development Disorder: If there is a history of Autistic Disorder or another Pervasive Development Disorder, the additional diagnosis of Schizophrenia is made only if prominent delusions or hallucinations are also present for at least a month.

Table 5. Diagnostic Criteria for Paranoid Type (DSM-IV-TR)

Diagnostic Criteria for Paranoid Type (295.30)

A type of Schizophrenia in which the following criteria are met:

A. Preoccupation with one or more delusion or frequent auditory hallucinations.
B. None of the following is prominent: disorganised speech, disorganised or catatonic behaviour, or flat or inappropriate affect.

Differential Diagnosis

What is provided here is a differential diagnosis based on the evidence available in both *Zen and the Art of Motorcycle Maintenance* and *Lila.* A differential diagnosis is a systematic diagnostic method used to identify the

presence of entity where multiple alternatives are possible. If we entertain the idea of a differential diagnosis what is suggested is a diagnosis of Dissociative Identity Disorder. Dissociative Identity Disorder is one of the dissociative disorders primarily characterised by an individual having two or more separate ego states, or alters, different modes of being and feeling and acting that exist independently of each other (Davison & Neale, 1998). Each of these ego states may come forth and are in control at different times, this can subsequently result in gaps in memory because at least one alternate usually has not control with the other. The difference between schizophrenia and dissociative identity disorder is best described in terms of the 'split'. The 'split' in schizophrenia is between thoughts and feelings, whereas in dissociative identified disorder it is the 'split' between personalities which can maintain contact with reality (Ettinger, Crook & Stein, 1994).

Table 6. Diagnostic Criteria for Dissociative Identify Disorder (DSM-IV-TR)

Diagnostic Criteria for Dissociative Identity Disorder (300.14)
A. The presence of two or more distinct identities or personality states (each with its own relatively enduring pattern of perceiving, relating to, and thinking about the environment and self).
B. At least two of these identities or personality states recurrently take control of the person's behaviour.
C. Inability to recall important personal information that is too extensive to be explained by ordinary forgetfulness.
D. The disturbance is not due to the direct physiological effects of a substance or a general medical condition.

Criteria A requires the presence of two or more distinct identities which are presented in the *Zen and the Art of Motorcycle Maintenance* and *Lila* text as Pirsig and Phaedrus, each with their own patterns of perceiving and thinking about their environment and self. For example, Pirsig (or the narrative) is "primarily a person dominated by social values" (Pirsig, 1974, p. xiv) where

Phaedrus was “dominated by intellectual values” (Pirsig, 1974, p. xv). Here Phaedrus is given in the content of being in the physical world, beyond a mere mental abstraction by Santo and Steele (1990) in their analysis of the text stating the Phaedrus is “flesh and blood people” (p. 136). Additionally, each of these identities recurrently take control of the individual’s behaviour (Criteria B, Table 3) and the inability to recall personal information beyond the scope of ordinary forgetfulness (Criteria C, Table 3). Both of which are present within the text.

Why Phaedrus?

Phaedrus does not mean ‘wolf’ in Greek as Pirsig originally thought based on a mistake stemming from an experience at the University of Chicago (Pirsig, 1974). The mistake came from a misinterpretation of Plato’s *Phaedrus*, where a likeness was made to a wolf. The fact being that it was not *Phaedrus*, but *Lysias* whose name is similar to the Greek *lykos* that does mean ‘wolf’. Although Pirsig states that his *“hyperactive mind seized upon this as* [his] *definitive relationship to the school”* (Pirsig, 1974, p. xii), an alternative will be provided here through the examination of Plato’s *Phaedrus*.

Plato’s Phaedrus, whose name translates to ‘radiant’ or ‘bright’, was born to a wealthy family during the mid-5th century and was the first cousin of Plato’s stepbrother Demos (Nails, 2002) and appears most notably in Plato’s works entitled *Phaedrus* and the *Symposium*, and is present for the speeches in *Protagoras.* This character also appears in the poetry of Alexis entitled *Phaidros* (Arnott, 1996; Smith, 1872). Rowe (2005) suggests Plato’s Phaedrus was mad about *logoi*, of which the most general meaning would be ‘words’ or ‘things said’ (p. xiv). This interpretation of the Plato character would best match that of Pirsig’s Phaedrus who’s ‘creation’ was caused by Pirsig grappling with his

colleagues Sarah's statement *"are you teaching quality"* (Pirsig, 1974, p.229) and what indeed the word 'quality' meant.

Plato's *Phaedrus* dialogues revolved around discussion of whether speeches are 'to be a good or a bad one' (Rowe, 2005, p. xvi) by the means of three speeches on the topic of love between Socrates and Phaedrus. The topic only used as means of metaphor to discuss the proposed use of rhetoric. Rhetoric being the art of discourse that aims to improve the capacity of the writer to inform or motivate others. In *Phaedrus,* Plato suggests the true art of rhetoric is based upon the knowledge produced by the dialectic and drawn in his use of rhetoric to inform Phaedrus to take up philosophy. This influence is reflected in Pirsig's Phaedrus character who is set to undertake a philosophical inquiry into quality.

Pirsig's Definition of Quality

> *"Quality is shapeless, formless, indescribable. To see shape and forms is to intellectualise. Quality is independent of any such shapes and forms. The names, the shapes and form we give Quality depend only partly on the Quality"* (Pirsig, 1974, p. 318)

As a means of understanding Pirsig's first text, *Zen and the Art of Motorcycle Maintenance: An Injury into Value* (1974) exploration is given to the four-essential points devised and the context in which these were formulated, with some classifications drawn from his second book *Lila: An Inquiry into Morals* (1991). This examination of Pirsig's essential points will provide the conceptual platform on which we need to stand to view quality from his perspective. Pirsig's first point refers to the perceived inability to define quality.

1. It is not possible to define quality

Pirsig categorically states that it is not possible to define quality. He states that: *"Quality is a characteristic of thought and statement that is recognised by a non-thinking process. Because definitions are a product of rigid, format thinking, quality cannot be defined"* (Pirsig, 1974, p. 260). He then goes on to state that we are *"stupid about quality"* (Pirsig, 1974, p. 260) in that we continually strive to define it. In *Lila: An Inquiry into Morals* (1991) Pirsig states that the subject-object relationship is in fact a relationship in which Quality is the first division: *"the first slice of undivided experience – is into subjects and objects. Once you have made the slice, all of human experience is supposed to fit into one of these two boxes. The trouble is, it doesn't"* (Pirsig, 1991. P. 124). In both instances Pirsig manages to provide a definition of Quality which offers no defining characteristics or attributes as to what quality is. In fact, the definition given in the 1974 text, as above, shows a degree of logical inconsistency and is *"completely irrational"* (Pirsig, 1974, p. 260). This perceived inability to define quality leads on to Pirsig's second essential point that if you cannot define a concept it is impossible to know that it exists.

2. If you cannot define a concept it is impossible to know that it exists

Pirsig's second essential point following on from the first is that it is not possible to define quality. Pirsig comments that *"if you can't define it* [quality], *what makes you think it exists"* (1974, p. 273) and it is this comment which is the first insight into the exploration of realism which will eventuate into the formation of the Metaphysics of Quality: Pirsig's own theory of reality. Metaphysics is what Aristotle called the First Philosophy (Madison, 2008, p. 248). It's a collection of

the most general statements of a hierarchical structure of thought, which is viewed as *"the part of philosophy which deals with the nature and structure of reality"* (Pirsig, 1991). Therefore, Pirsig's Metaphysics of Quality is the examination of the reality of quality: it's nature and structure.

3. Quality is like modern art

The third essential point in Pirsig's text is that quality is like modern art. We may not be able to define great modern art, but we are frequently able to recognise it when we see it. As Pirsig (1974) states *"even though quality cannot be defined, you know what quality is"* (p. 260). This builds on the exploration of critical reality and introduces the philosophy of perception and subjectivity, with the notion of an emotional element in the individual's determination of quality suggesting that 'judgements' about the quality of something are determined before it is intellectualised, which brings us to Pirsig's final essential point.

4. There is intellectual dishonesty in discussions that involve terms that have not been adequately defined

Pirsig's fourth essential point that there is intellectual dishonesty in discussions that involve terms that have not been adequately defined, cuts to the very core of his struggle to conceptualise and define this notion of 'quality'. Pirsig states that *"definitions are the foundation of reason"* (1974, p. 272). Thus, without a clear definition how can one reason about its existence which takes us back to his second essential point.

Summation of Pirsig's Four Essential Points

If we consider Pirsig's four essential points, either individually or as a collective, we begin to see the complexity which has evolved from that one single question asked of Pirsig in his early academic career *"Are you teaching quality"* (Pirsig, 1974, p. 227). From these essential points it is understandable how Pirsig came to spend so much time grappling with this increasingly nebulous concept. One which, although it appears obvious, its actual existence becomes questionable once you apply any type of systematic logical or empirical process to it. To gain a clearer idea of what quality is we need to approach it from a metaphysical perspective where we need to determine its potential state within our reality.

Understanding Quality from Pirsig's Perspective

As has been stated, Pirsig suggests that Quality cannot be defined because it empirically precedes any intellectual formal construction of it, primarily because quality exists always as a perceptual experience before it is formally considered either descriptively or academically. This is subsequently reflected in *Lila's Child* (Pirsig & Glover, 2003) where it is indicated that dynamic quality can only be understood intellectually through the use of analogy. This reference would therefore suggest that some elements of quality can be defined and if this is the case they can be examined and measured. In order to achieve this, we need to better understand what it is we are looking at, and for this reason Pirsig (1974) breaks quality down into two forms: Static Quality patterns (patterned) and Dynamic Quality (un-patterned). What Pirsig is indicating is that quality manifests itself in two different forms and should be considered a Dialectical Monism.

Dialectical Monism is the ontological position that states that reality is ultimately a unified whole and that essential unity is that of complementary polarities. This ontological position was discussed in Chapter One. From Pirsig's perspective the static and dynamic forms of quality create a unified whole, and demonstrates the influence of eastern Philosophy, such as the Buddhist Heart Suture Scripture on his work.

> *"Form does not differ from the Void, and the Void does not differ from Form. Form is Void and Void is Form"*
>
> (Heart Sutra (Cited in Northrop, 1946))

The notion in both the Western and Eastern philosophies is that in order to have one you require the opposite feature for the initial feature (element) to exist. A classic example of this is the polarity of 'good' and 'evil'. In order for us to have a conceptual understanding of 'good' we need to have an equally good understanding of the concept of 'evil'. Similarly, within the theoretical construct of reality we can have two or more manifestations, such as the subjective / objective paradigm which underpins Pirsig's notion of quality and further supports his use of dialectical monism ontology.

Pirsig views reality as two potential manifestations, Subjective (Mental) reality and Objective (Physical) reality (Figure 11) (Pirsig, 2974, P. 317). Subjective reality is then further divided into what Pirsig terms Classic (Intellectual) and Romantic (Emotional) subjectivity, suggesting that subjective reality manifests itself in two different states which reflects the dialectical monism ontology used in his approach. Similar, in his regard to quality as a reality he offers two manifestations: Romantic Quality (or a pre-intellectual reality) and

Classic Quality (an intellectual reality) (Figure 12). As with Pirsig's Subjective view of reality (Figure 11) his view of Classic Quality (intellectual reality) is divided into two polar components Subjective (Mind) and Objective (Matter) Classic Quality.

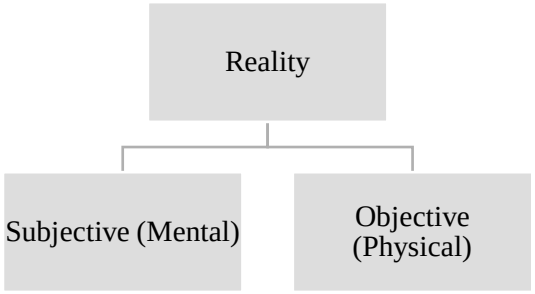

Figure 11. Pirsig's View of Reality

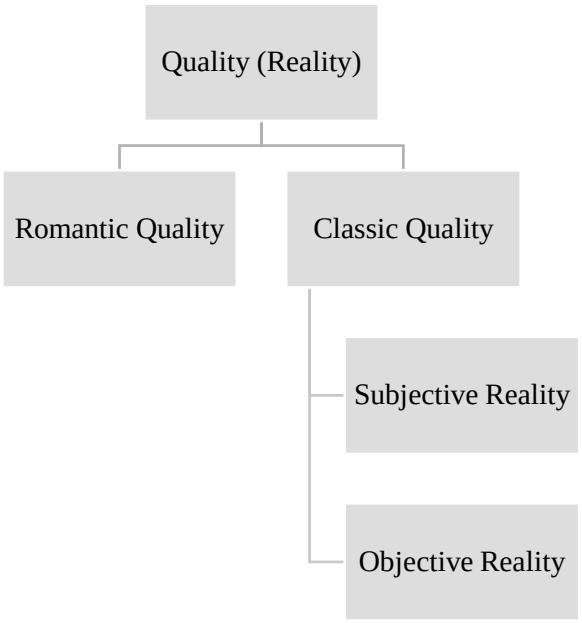

Figure 12. Pirsig's View of Classic Quality

The notion around objects, ideas, 'form' as one, but manifests itself in (two or more) forms which in Pirsig's case means quality can be either 'static' or 'dynamic' depending on its state of intellectualisation. This ontological approach to quality allowed Pirsig to move from his original Classic/Romantic view to differentiate between patterned (static) and un-patterned (dynamic) states of

quality, providing the concept of constant change over time or flexibility within its theoretical construct. Both will be discussed.

Immediate Experience

Before we can delve into 'dynamic' and 'static' quality, consideration needs to be given to the *"pre-intellectual cutting edge of reality"* (Pirsig, 1991, p. 133) or *"the first slice of undivided experience"* (Pirsig, 1991, p.124). What is being referred to here is the immediate experience before any divided consciousness may be made before internal and external states (McWatt, 1998). Pirsig describes this experience as an awareness of the changing flux of reality before any conceptual distinctions, such as subjects and objects are made (Pirsig, 1974, p. 151). He goes on to equality 'quality' with F.S.C. Northrop's (1946) 'aesthetic continuum'. Pirsig later states that it is a perceived event. *"Quality is not a thing. It is an event* [and] *it is the event at which the subject becomes aware of the object"* (Pirsig, 1999, p.91). McWatt (1998) describes immediate experience as *"experience where there is no distinction between what is experienced and the art of experiencing itself"*, *"only after the experience do concepts such as perceiver and perceived arise"*. As such immediate experience is inherently linked to Dynamic Quality.

Dynamic Quality

Dynamic Quality includes everything that has not been identified as static. Lamb (2014) identified Dynamic Quality as being intuitive, original, creative, spontaneous and difficult to describe. It is viewed as the force of change in the universe; when this aspect of quality becomes habitual, it becomes static. Dynamic Quality is recognised before it can be conceptualised. An example of this would be why the dynamic fragrance of a rose can be recognised before the

static analysis explaining why the rose smells beautiful is mentally constructed. This is reflected in Pirsig and Glover's (2003) text *Lila's Child: An Inquiry into Quality* where they state that dynamic quality cannot be defined. It can only be understood intellectually through the use of analogy.

Static Quality Patterns

Static Quality is known as one or more static patterns of value, or is everything that can be conceptualised or recognised as forming patterns. Within the metaphysical framework the all-inclusive static patterns of value are broken into four levels: inorganic, biological, social and intellectual patterns (Figure 13) in ascending order of morality, with nothing being left out, or 'no thing' being left out apart from Dynamic Quality which is not a 'thing'.

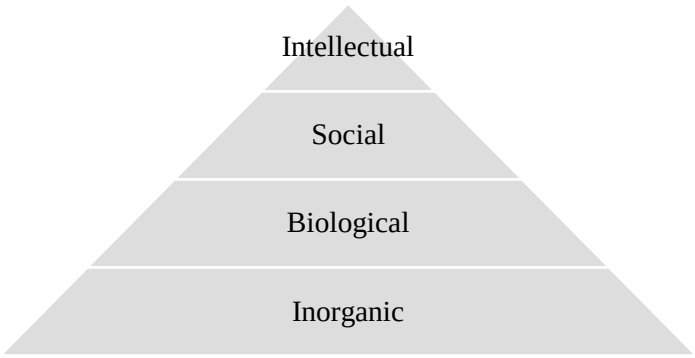

Figure 13. Pirsig's Four Levels of Static Quality

1. Inorganic Patterns

Inorganic patterns are every object without DNA (MoQ Wiki, n.d.) such as chemicals and quantum forces.

2. Biological Patterns

Biological patterns are described as every object with DNA (MoQ Wiki, n.d.) such as plants and animals.

3. Social Patterns

"Social patterns include such institutions as family, church and government. They are the patterns of culture that the anthropologist and sociologist study" (MoQ Wiki, n.d.). Example of social patterns would include cities and ant colonies.

4. Intellectual Patterns

Intellectual patterns can be viewed as the "skilled manipulation of abstract symbols that have no corresponding particular experience, and which behave according to rules of their own" (Turner, n.d.), such as thoughts and ideas which McWatt (1998) describes as any pattern that appears long enough to be noticed within the flux of immediate experiences.

Pirsig describes evolution as the moral progression of this pattern of values with the intellectual patterns being the highest. For example, a biological pattern overcomes an inorganic pattern (a bird flying which overcomes gravity), a social pattern overcomes a biological pattern (marriage), and an intellectual pattern overcomes a social one (civil rights) (MoQ Wiki, n.d.).

Pirsig and Phaedrus as a Romantic and Classic Analogy

Pirsig indicated that quality can only be understood intellectually through the use of analogy which he achieves, to some degree, through the use of Romantic (Emotional) and Classic (Intellectual) Quality. It is important to note that he is not suggesting here a duality, as quality needs to be viewed as one. What he is indicating is that quality manifests itself in two different forms and should be considered a Dialectical Monism. Dialectical Monism being the ontological position that states that reality is ultimately a unified whole and the essential unity is that of complementary polarities, this being from Pirsig's perspective the two

forms of quality and is largely reflective of Eastern Philosophy of which he was a student. Dialectical monism is also reflected in Heraclitus' work, being one of the earliest notable exceptions to the Eastern monopoly on the ontological position.

> *"By cosmic rule, as day yields night, so winter summer, war peace, plenty famine. All things change."*
>
> (Heraclitus, Fragment 36 (Cited in Stokes, 2002))

The notion in both the Western and Eastern philosophies is that in order to have one you require the opposite feature for the initial feature or element to exist. Drawing on Heraclitus example of polarity of 'day' and 'night'; In order for us to have a conceptual understanding of 'day' we need to have an equally good understanding of the concept of 'night'. Similarly, within the theoretical construct of reality we can have two or more manifestations such as the romantic/classis paradigm which underpins Pirsig's notion of quality and further supports his use of the dialectical monism ontology.

Parallels can be further extrapolated if the same ontology is applied to Pirsig and Phaedrus. As with the examples of character traits given in Appendix Two, each persona of Pirsig holds opposite values; Pirsig as a Narrator with a strong sense of social (Romantic) values and Phaedrus with intellectual (classic) values.

> *"Pirsig is primarily a person dominated by social values"*
>
> (Pirsig, 1974, p. xiv)
>
> *"Phaedrus was dominated by intellectual values"*
>
> (Pirsig, 1974, p. xv)

The personality split between Pirsig and Phaedrus could be a further extension of the dialectical monism ontology present throughout *Zen and the Art of Motorcycle Maintenance*. This also indicates that in order for Pirsig to be one with himself, Phaedrus needs to be accepted as part of the whole. This occurs at the end of *Zen and the Art of Motorcycle Maintenance*.

Links Back to the Polytechnic Sector

The increasing focus on quality is becoming a greater concern within the polytechnic and private training sector (Biggs, 2003), so reflecting on Pirsig's work is becoming progressively more important. The concept of quality in the polytechnic and private training sector is not an easy one to define, although many have tried. Fraser (cited in Cryer, 1993) defined quality in the polytechnic and private training sector as *"embracing, but not synonymous with, effectiveness, efficiency and accountability"*. Whereas Ellis (1993) referred to quality as a *"somewhat more ambiguous term since it has connotations of both standards and excellence"* (p.3). Whilst Pfeffer and Coots (1991) state quality is *"a slippery concept"* (p. 31) which means different things to different people (Sallis, 1993, p.21). It should be viewed as a 'dynamic', rather than 'static', idea through which current ideas and contemporary educational best practices can be channelled. This notion of dynamic quality of course is reflected in Pirsig's work, which raised the question of how can his model for the metaphysics of quality be applied to the current the polytechnic and private training sector environment, which is under increasing pressure to produce 'quality' graduates and research outputs which are marketable and measurable. If we combine this with terms such as *"curiosity, enthusiasm, the ability to cooperate, intellectual generosity, artistic independences, originality, innovation and many other unquantifiable qualities*

[which have been identified as] *essential to good education and research"* (Lamb, 2014) with many of these things being intuitive and difficult to describe and assess, the domain of Dynamic Quality becomes of increasing interest.

However, most assessment of our work now views quality as a requirement for regulations and accountability, rather than as a pursuit of excellence and intellectual growth. Dynamic Quality is being lost and the lower levels of Static Quality Patterns endlessly measured. Lamb (2014) poses the question *"does all the time now spent measuring, auditing, setting standards push up turn quality or just act as a way of ensuring that very small percentage of very poor quality is found and acted upon*[?]*"*

Chautauqua Four

Actors:
Mùrén, Staff Member One, Staff Member Two, Staff Member Three

There has been that common thread of quality in education running through each of the stories presented. With questions asked of the quality of teaching materials, the quality of learning and teaching within the class, and the quality of assessment and the qualifications which flow on from completion. But what is really being considered when we look at quality, what is this thing called 'quality' which keeps being referred to. What is Quality?

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Following on from Mùrén's teaching role and his involvement with the Programme Approvals Committee he moved into the role of Academic Quality Advisor for the institute located within the Academic Quality Unit. The primary focus of the role was to measure the 'quality' of each programme the institute
~~~

offered by means of a self-assessment evaluation, which Programme Managers and Heads of Schools completed, which he then analysed and report on.

The self-assessment comprised of six overarching questions based on New Zealand Qualification Authority Educational Evaluation and Review (EER) programme. The objective was to measure the quality of an individual's programme of study and determine where resources needed to be allocated. Additionally, it was to be used to highlight poor performance programme which would be closed.

The first year in this role Mùrén undertook the process, collected and analysed all the information submitted by the Programme Managers and Heads of School, undertook calculations and rated each academic programme on a grading scale similar to ones used to marking students work. But one thing bothered him, did these grades really reflect the quality of the programmes? Just because all the students passed, and all the students provided positive feedback, did that make it a quality programme? Or was there more to it? All the students in the second chautauqua passed with 'A' grades and provided very positive feedback, was that a quality paper or was it a 'bunny paper[1]', the students got an easy 'A' and of course they were happy with that. The students in the third chautauqua managed to pass a paper by copying published works, the statistics for that paper would show no indication of what had transpired. So, what was it that he was actually seeing here? Did this process truly show the quality of a programme? It showed something, but not necessarily quality. Or is this what quality looks like in the

[1] A paper views as being easy by students

polytechnic and private training sector? Happy students and easy marks. How was he to measure something he did not clearly understand?

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At the next staff meeting for the Academic Quality Unit, whilst they were reflecting on the programme reports indicating the quality 'grade' for each programme, Mùrén raised his concerns and the reflections he had made on the process and means of measurement. To his surprise he was not the only one who had been undertaken such pondering.

> Staff Member One: "I hear what you are saying and have been thinking about this too. What is it that we are aiming to measure here?"
>
> Staff Member Two: "Quality, of course."
>
> Staff Member One: "Yes, but what is quality?"
>
> Staff Member Two: "Quality is what we are measuring"
>
> Staff Member One: "Which is what?"
>
> Staff Member Two: "Quality!"
>
> Mùrén: "Yes, but what does quality look like in education? Is it high pass rates and happy students?"
>
> Staff Member Three: "Yes, that is what it is."
>
> Mùrén: "But what about the level or value of the learning?"
>
> Staff Member Two: "If they passed they learnt."
>
> Staff Member One: "That depends of the quality of the assessment."
~~~

Staff member Three: “Of course it does, good assessment, means good learning but the quality of the assessment is high.”

Mùrén: “But what does the quality of a good assessment look like. How are we defining ‘good’, how are we defining ‘quality’?”

This discussion was never resolved. In fact, the constant answer to the question of what quality is, was in fact quality. And it was clear that Mùrén was not the only one who was having trouble defining a term within the education sector which seems so readily available within the business and manufacturing realm.

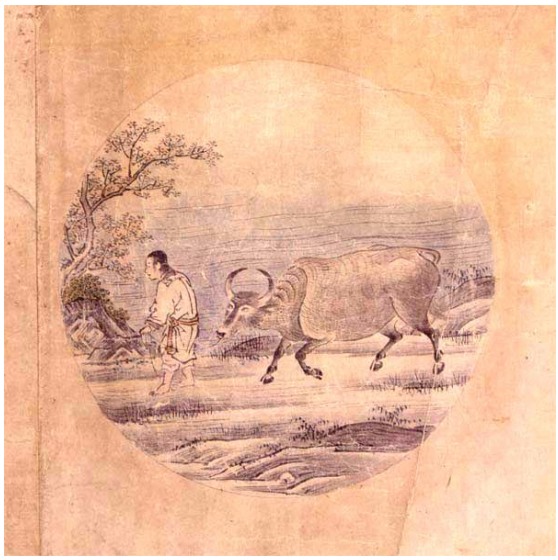
Chapter Summary

What has been provided in this chapter is an insight in the development of Pirsig’s Metaphysics of Quality as a way of exploring his definition of quality in the polytechnic and private training sector: *“Quality is a characteristic of thought and statement that is recognised by a non-thinking process. Because definitions are a product of rigid, formal thinking, quality cannot be defined”* (Pirsig, 1974, p. 260). This has been achieved through the examination of Pirsig’s Four essential points regarding quality, and then further analysed in terms of how he divided quality into two complementary polarities: Dynamic Quality (un-patterned) and Static Quality Patterns (patterned) which is reflective of his exposure to Eastern Philosophy.

Through his exposure to Eastern Philosophy the Dialectical Monism Ontological approach taken and the examination of immediate experiences, it becomes apparent that it is only Dynamic Quality that cannot be defined, as Static Quality Patterns can be defined as they have undergone an intellectualisation

process and become conceptualised. This being the case, is it still quality which we are looking at if a series of potential criterion for the measurement of, what are not predetermine characteristics? From Pirsig's perspective if quality is the *"the pre-intellectual cutting edge of reality"* (Pirsig, 1991, p. 133) or *"the first slice of undivided experience"* (Pirsig, 1991, p.124) then what is it that we are considering with static Quality Patterns, which are no longer 'pre-intellectual'?

Chapter Four: Classical Metaphysics and its Application to Quality



(van den Dungen, 2016, p. 33)

V. Taming the Bull

The whip and rope are necessary,
Else he might stray off down
some dusty road.
Being well-trained, he becomes
naturally gentle.
Then unfettered, he obeys his
master.
(Koller, 2016, p.5)

(van den Dungen, 2016, p. 38)

VI. Riding the Bull Home

Mounting the bull, slowly
I return homeward.
The voice of my flute intones
through the evening.
Measuring with hand-beats
The pulsating harmony,
I direct the endless rhythm.
Whoever hears this melody
will join me.
(Koller, 2016, p.5)

Having explored Pirsig's Metaphysics of Quality, this chapter will focus on the Classical Metaphysics of the Ancient philosophers Socrates, Plato and Aristotle, whose approaches underpinned Pirsig's own philosophical views. In doing this, examination will be given to Plato's Theory of Form and Aristotle's Universal and Particulars, with reference to how we can view Quality. This will then be followed by the exploration of Quality as an Event, rather than as an item, as suggested by Pirsig. Further, this notion will be developed with the use of two thought experiments which will allow us to consider Quality as an Experience, rather than either an Item or an Event. The principal premise within this chapter is that:

Metaphysics are a philosophical approach which examines the fundamental nature of being. Physical objects in metaphysics are known as Particulars; and not physical objects are Universals. Quality would be considered a universal. The problem of universals considers if items which are considered universal, exists in reality.

And that:

Plato's Theory of Form provides a theoretical construct on which no physical objects can be conceptualised. The form of roundness provides a map on which other concepts can be equally identified and discussed.

Further:

It will be postulated that through this examinations of metaphysics that Pirsig's metaphysics of quality is not grounded in Plato's Theory of Form but is rather more aligned to Kant's transcendental idealism.

Metaphysics Overview

Metaphysics is a traditional branch of philosophy, described by Aristotle as the first philosophy, concerned with the explanation of the fundamental nature of being and the world that comprises it. Traditionally, metaphysics attempts to answer two fundamental questions which in the broadest terms are:

1. What is ultimately there?
2. What is it like?

Although the realm of metaphysics encompasses a potential universe of inquiry, the focus within this thesis is centred on questions around a) being, existence and reality, and b) empirical and conceptual objects as the concept of quality in education is examined. The nature of *'Being'* is a persistent theme through metaphysical inquiry and cuts to the very core of the first philosophy fundamental questions: 'what is ultimately there?' and 'What is it like?'

A clear distinction needs to be maintained between Existence *'that* something is' and Essence '*what* something is' whilst maintaining that a relationship between the two is necessary as reflected in Aristotle's *Metaphysics*. Here we are determining whether or not Quality exists; *that* quality is, rather than determining what the essence of quality is. The determination of what quality is can be viewed with the exploration of objects and their properties, which leads to the focus on empirical and conceptual objects.

The world is viewed as containing numerous individual things, both physical, like chairs and rocks, and abstract, like love. The physical objects are known in metaphysics as Particulars; in that they are said to have attributes, such as size, shape, and location (in space and time). In the case of the chair or the

rock, it can be said to have a certain size and shape, and be located in a particular area, at a particular time. In addition, objects can be further refined through the use of Universals, as considered with particular things have common characteristics. For example, if there were two chairs, they would share the characteristic of 'being a chair'. In this instance Universals are viewed as abstract whereas Particulars are concrete. However, there can be instances where a Particular can be used to describe an instance of something which would otherwise be considered a Universal. Such an example could be the 'redness' of an individual apple as opposed to the Universal 'redness; of all apples (Wolfram, 1989). This then raises the question known as the Problem of Universals: Do properties exists, and if so, what are they? While philosophers agree we talk and think about properties, there is disagreement on whether these Universals exist in reality or merely in thought and speech. This cut to the core of the metaphysics of quality: Does Quality as a Universal exist in reality or is its existence merely in thought and speech?

Classical Metaphysics

As an introduction to classical metaphysics an examination will be given of Plato's text, the first metaphysician in Western philosophy whose works are extant enough for appreciation and evaluation (White, 1987). Plato's works also offer an excellent example of the stages typical of metaphysician's work (White, 1987). Whilst it has been suggested that Plato modifies and even changes his basic metaphysical position (Teloh, 1981) it will not be covered in depth within this thesis.

Plato's Metaphysics

From Plato's earliest work he assumed a principle which he suggested was advocated also by Socrates in his youth (*Parmenides, 132a*) and subsequently in *Republic* (507, 596) and *Philebus* (16d). The principle, later referred to by Aristotle as 'the one over many' is that *"whenever we have two or more 'X's, two of more examples of 'X'ness or two or more things both call 'X'; there must be something the same in all of them in virtual of which they are all 'X's, examples of 'X'ness or called 'X's by us"* (White, 1987, p. 12) with Plato's main example of this principle being 'Beautiful things are beautiful by beauty' (*Greater Hippias, 289d; Phaedo, 100c; Gorgias, 497e*). The something (*X*) being referred to is considered the same in all examples of it or in all things of the same name. In Plato's example of beauty, the something is beauty. Plato called this something 'the thing itself', for example 'X itself' or 'beauty itself'. This concludes in the assumption that all *X*s have something in common which makes them *X*s. For Plato's examples which would be that all 'beautiful' things have 'beauty' in common which makes them 'beautiful'. Following Plato's example in the case of 'quality', all 'quality' things have 'quality' in common which makes them 'quality'. However, in this concept all things are being treated as the same. This led Plato to the next step where he moved from the view that all examples of *X*ness must have something in common to the view that one can distinguish between examples of *X*ness and that which they have in common, what Plato referred to as 'the *X* itself' (*Greater Hippias, 287d-e*). This allows us to distinguish between beautiful things and beauty, or quality things and quality itself. Plato took this distinction to be a distinction between two things. With this Plato moved from the assumption that there must be <u>something</u> common to two or

more examples of *X*ness, the '*X*' itself, to the assumption that there must be something in common between them. This then makes '*X*' itself or *X*ness a sort of thing other than those things which are examples thereof.

Parmenides Theory of Form

Little is known about Parmenides of Elsa with only fragments of his work surviving. Regardless of this, what has remained shows Parmenides's attempt to prove that change is impossible, and that reality is singular, undivided and homogenous (Stokes, 2002). Parmenides thought *"that to think of something is to give it some semblance of existence, then one cannot think of anything that is truly 'not'"* (Stoke, 2002, p. 17). An example of this is provided in Stokes (2002) text; one must think of something; there must be a presence in the mind, take a unicorn for instance, to think of a unicorn means that the unicorn, or the idea thereof, exists in the mind and therefore it cannot be truly said that unicorns fail to exist completely. The work of Parmenides has influence on Plato and his development of the Theory of Form.

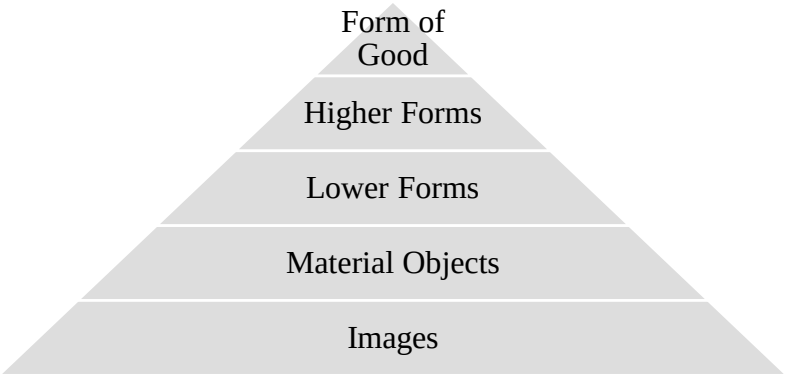
Plato's Theory of Form

Plato's 'middle dialogues', particularly *Phaedo, Republic, Symposium* and *Phaedrus* brings the reader's attention to what he calls 'forms'. Banach (2006) offers a simplistic description of Form, stating that a Form is the abstracting of a property from an object. As an example, Banach (2006) refers to the roundness of a ball being considered a Form if it is considered separately from the balls colour and weight. That is when the various Forms of a given object are combined they form the archetype or perfect model of the given object. Patterson (2009) provides a well-articulated definition of Forms as *"entirely imperceptible but grasped in thought; non-special and non-temporal yet fully real; independent of*

and separate from worldly things yet 'participated in' by them and somehow responsible for their being what they are" (p. 18). This definition will be worked through to fully understand Plato's concept of Form before moving on to examine it in the content of the classical philosophers' work. Firstly, Plato stated Forms are 'entirely imperceptible but graphed in thought'. What is being referred to is the notion that Forms are not 'visible' within the physical world around us other than through our own cognitive processes. It is our mental processes which provide the 'substance' to the Form under consideration. This is reinforced by the second piece of Patterson's definition that Forms are 'non-spatial and non-temporal yet fully real'. Plato's Forms has no present or location in space or time. They exist outside what one would consider the time-space continuum as a physical location nor time reference can be given to them. However, as the Forms are identified they are considered, before any philosophical thought is given, to be a feature of the real world. This is echoed in the final piece of Patterson's definition, that forms are 'independent of and separate from worldly things yet 'participated in' by them and somehow responsible for their being what they are'. As Form's have no spatial or temporal location they are effectively not within the world we operate, yet they are very much a strong feature of the world we are in to the extent that without them we would view and function in our environment in a very different manner.

Plato seldom explicitly argues for the Form, but he indicates that they serve numerous purposes, and these in turn point to the corresponding implicit arguments. Later philosophers tend to classify such arguments as metaphysical, epistemological or logical, however Plato's fundamental argument for Form was in fact normative. Patterson (2009) indicates that they are types of things and

relationships entailed directly or indirectly by the nature of some objective good, for example human community or soul and are not shared attributes or things of meaning in general terms. Banach (2006) takes this one step further to show the relationship between Form and the material objects from which they are drawn. To achieve this objective, Banach offers a visual representation of the six main properties of Form which he has identified, as depicted in this the figure below. Drawing on Pirsig's view of Quality the upper most level of Banach (2006) properties of the Forms is under considered. Throughout Pirsig's works, his concept and understanding of Quality is linked with Value and Goodness, however, it remains unclear to how such a non-physical 'thing' can exist independently for something of a more physical nature. Socrates in Plato's Text *Meno*, offers a series of examples of order to explain how this can be the case.



(sourced from Banach, 2006)

Figure 14. Properties of the Form

Plato on 'Goodness' and 'Roundness'

> "***Meno*: *Can you tell me, Socrates – is 'being' good something you can be taught? Or does it come with practice rather than being teachable? Or is it something that doesn't come with practice or learning; does it just come to naturally? Or some other way?"*** (*Meno*, 70a)

This is the introduction to Plato's *Meno*, a dialogue between Socrates and Meno on how do people come to be good? Is it by teaching, by their nature or by another means? It is viewed as the traditional means of Plato's writing and explores his theory of Form. The text begins when Socrates insists on first investigating what *'being good'* is, and it is this section of the text which is of interest within the context of the current investigation and will provided a further conceptual understanding of Plato's theory of Form. However, before delving into the theory of Form for *'being good'* and *'what quality is*' first exploration will be given to Plato's example of *'roundness'*.

> *"**Socrates:** Just what I'd mean with anything else. Take roundness, for example – I'd say that roundness was one sort of shape; I wouldn't simply say that roundness is the same as shape, And the reason I'd put it like that is because there are other shapes besides roundness."*
> (*Meno*, 73e)

For Plato, roundness, has many instances and shares a universal property of roundness over many round things. Thus, roundness is a form. For example, a football, a netball or even a circular figure drawn on a piece of paper can all be round, therefore all share the universal property of roundness. Roundness is *a* shape. Plato extends this argument to colours such as white, which holds the universal property of whiteness. That is whiteness is a universal property over many white objects, such as a white rabbit, white snow or white paper. This approach can then, as Socrates refers, can be applied to many other universal properties such as Justice, Beauty and Quality.

Plato's Theory of Form in his text *Meno*, is extended to the Form of goodness, in that, there is a universal property of goodness which is inherent in all things good. In the case of humans, goodness, as a property is linked to knowledge in that it is a form which can be taught given the correct conditions. This notion of goodness being a teachable quality forms a segment of the *Meno* text. Goodness as a Form is referred to in *Symposium* and *Phaedo's* being further illustrated Snow and Fire, which can be used as predictors for Cold and Hot, in that Fire has a property of the Form Hot and Snow with the Form Cold. Therefore, in the context of the topic under investigation in this text, teaching could hold the Form Quality.

Aristotle's Universal and Particulars

Roundness and goodness as illustrated from Plato's viewpoint is a 'Form', however Aristotle rejected Plato's approach and offered a different solution to the possible of universal knowledge (Klima, 2004, Vezina, 2007). Aristotle's alternative theory, Universals and Particulars, that the theory of Form and redefined in the context of entities (specific things) and the properties that those entities hold. As an example, consider a red apple. The Universal will be the redness of the apple, with the apple being the particular. As an extension consider two red apples, now there are two Particulars (apple 1 and apple 2) both with the same Universal (redness). The addition of the notation 'P' for Particular and 'U' for Universals aids in the identification of this relationship as shown below.

P1 (apple 1) – U1 (redness)

P2 (apple 2) – U1 (redness)

This Universal (redness), now identified can be applied to other different Particulars, as in the redness of a rose. Continuing the notation from above:

P3(rose 1) – U1 (redness)

Based on these examples both the apples and rose have the Universal redness or that both the apples and rose have a common property, redness.

Aristotle's use of Particulars and Universals bring an additional level of clarification as to how Plato's Theory of Form can be further extracted to consider those objects which are singular and physically present within our reality, such as the apple and the rose given in the examples above and those properties which can be universal and who's physical presence is not immediately identified within our reality, such as redness. For, clarification, these universal properties require a 'host' object in the physical domain. The universal property 'redness', in order to manifest itself, needed a physical host, an apple or rose. It cannot hold its own property in the physical dimension.

Kant's Metaphysics

As an extension of Aristotle's view on Plato's roundness and goodness, one can now consider for Form and Universal of Quality. In this case, Plato, a Form of Quality can be considered and with Aristotle, Quality would be viewed as a Universal. In both cases, the philosophical position covers the two major forms of realism, Platonic realism (*universalis ante res*) and Aristotelian realism (*universalis in rebus*) (Price, 1953). For both the terminology they used represents objects, albeit Forms, Particulars or Universals, that are real. For Platonic realism,

Universals, although real, don't exist in the same manner as real objects. Universals in the widest sense are broad and abstract not holding any spatial or temporal location, that are an abstract form. In this context, Quality, as a universal would not hold a physical location in space or time. However, the Form of which can be applied to physical objects in the real world as a means of identifying their ideal form. As an example of redness of a rose as the Universal Form of redness, then this Universal Form 'redness' is then copied on to all things red, such as the apple in the example above.

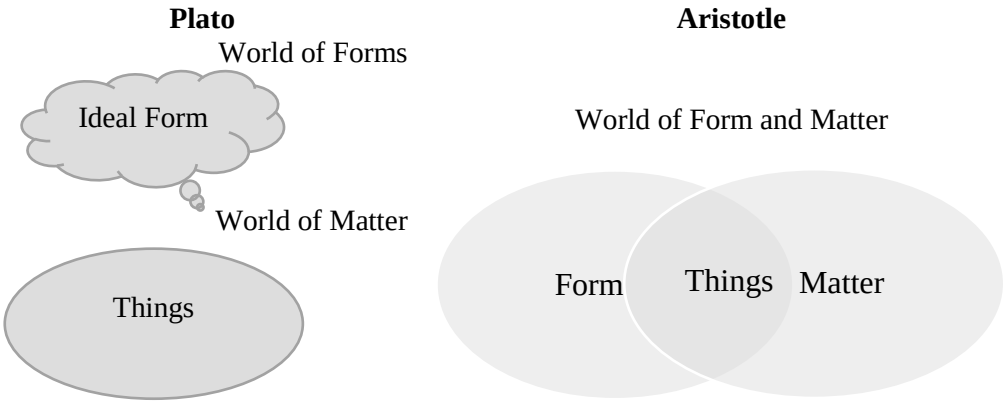


Figure 15. Plato and Aristotle's View of Form and Matter

In Pirsig's Metaphysics of Quality, he draws heavily on the philosophical approaches of the ancient philosophers and the position which they held, however similarities can be drawn between Pirsig's view of Quality and Kant's aesthetic understanding of being. Kant suggests that the principal concept of his aesthetic judgement is the ability to "judge an object in reference to the free lawfulness of the imagination in which there is a subjective harmony of the imagination with an understanding with an objective harmony." (Kant, 1987, p.91) This suggestion is supported by Kant interpretation of Universals and Particulars, in that:

> *"If the Universal (the rule, principle, law) is given, then judgement, which subsumes the Particular under it, is determinate. But if only the Particular is given and judgment has to find the Universal for it, then this power is merely reflective."* (Kant, 1987, p. 18)

This introduces a new philosophical position, idealism. Idealism offers the position, regarding Universals, that a property, say Quality, is constructed in the mind, so exists only as a description of a thing. As alluded to, in the quote above, idealism has two main groups, Objective Idealism and Subjective Idealism. Subjective Idealism holds that nothing exists outside the mind, whereas Objective Idealism postulates that 'there is only one perceiver, and that this perceiver is at one with that which is perceived' (Ben-Zeev, 1989). This position aligns itself with several of the Eastern philosophies. In Buddhist philosophy, which Pirsig also draws heavily on in *Zen and the Art of Motorcycle Maintenance*, there is the concept of consciousness-only (also referred to as Buddhist Idealism) where the position is that all existence is nothing but consciousness, or that nothing exists outside of the mind. Kapstein (2014) summaries this position stating, *"cognition experience itself, and nothing else whatever, even the particular objects of perception, are by nature just consciousness itself".*

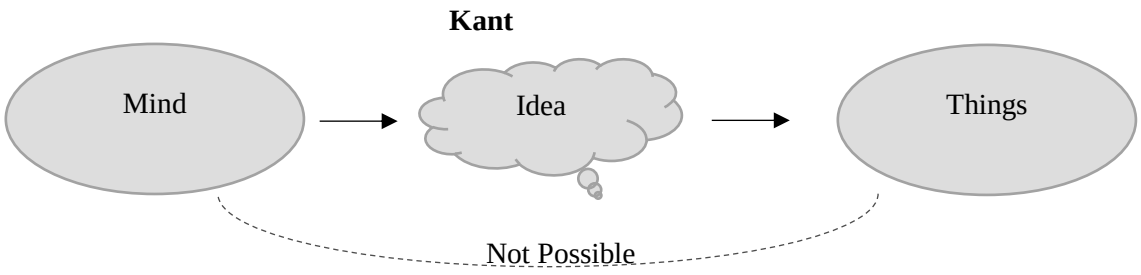


Figure 16. Kant's View of Mind and Things

Quality as an Event

Plato and Aristotle's philosophy would see 'quality' as a form or universal. An object which has its own essences and structure independent of the item with which it is being associated. This was clearly identified and discussed in the previous section. Pirsig's thinking and interpretation of quality moved the concept of quality, from a metaphysical perspective, to being considered an event. The purpose here is to consider quality as an event, and that it is the experience of that event in which the individual determines the level and depth of quality. Pirsig states in his text *Zen and the Art of Motorcycle Maintenance* that:

> *"Quality isn't a thing, it is an event... It is the event at which the subject becomes aware of the object… Quality is the event at which awareness of both subjects and objects is made possible… This means that Quality is not just the result of a collision of subject and object. The very existence of subject and object themselves is deduced from the Quality event. The Quality event is the cause of the subjects and objects."* (Pirsig, 1974, p. 304)

In Pirsig's follow up works *Lila*, his position on Quality as an event shifted to viewing "Quality is a direct experience independent of and prior to intellectual abstractions" (Lila, 1991, p. 73). This will be discussion in the next section following Thought Experiment Two.

Thought Experiment Two: Quality and the Cat

Any extension of the *Thought Experiment One* examination will be given to another famous thought experiment, which will further aid in the examination of the quality as a concept. Schrödinger in 1935 (Trimmer, 1980) proposed a

thought experiment in which a cat was placed in a steel chamber, along with a device. The device contained a Geiger counter and a small piece of radioactive substance, the size of which may, or may not (with equal probability), have an atom decay of one hour. If the small piece of radioactive material did decay there would be a discharge and through a relay a hammer would be released smashing a small flask containing hydrocyanic acid. If the chamber with the cat in it was left for an hour, and there had been no atom decay then the cat would still be alive, or alternatively, if there had been atom decay then the cat will be dead. At any given time within the stated timeframe, the cat could be considered in a mixed state (live/dead) of equal parts.

In this variation of the thought experience, consider that there is an object in a sealed box which has imposed on it a given level of ‘Quality’. Until you open the box the object can be considered, in equal parts, to have both a high level and a low level of ‘Quality’. Indeed, the very nature of the ‘quality’ will change depending on what it is attached to. Therefore, quality itself is always in a state of flux with a further analogy being drawn with the theory of the Copenhagen Interpretation of quantum mechanics.

This interpretation would suggest that the level of ‘Quality’ and object it is dependent on will change on the perception of it. Until the ‘Quality’ of an object is observed in hold a state of low and high-quality value in equal part, as demonstrated above. Once the object is viewed by an individual the level of ‘Quality’ is known.

Chautauqua Five

Actors:
Mùrén, Niú

Mùrén spent months pondering the question of what quality in education was, and if in fact there was such a thing as quality to begin with. This question lead Mùrén to explore the literature on quality management, educational evaluation methods and other methods by which the value of a programme is measured and assessed. He talked with lecturers and academics of education and educational psychology, to teachers with years of experience and to those well versed in quality management. However, he was unable to find an answer which satisfied him.

One day, by chance he met Niú in the café shop on campus. Niú was a fellow academic who was schooled in Eastern philosophy, who had started teaching at the same time he had. Mùrén explained to Niú about how he was seeking for an answer and understanding to quality within the polytechnic and private training sector. He described how he had talked with various people from numerous disciplines in the hope that one of them would be able to enlighten him, but to no avail. Niú paused, and then looked at Mùrén.

Niú: “Have you heard of the story of the Ox herder?”

Mùrén: “Not, I have not. And what does an ox herder have to do with quality, or education for that matter?”

Niú: “More than you think, if you think about it.”

Niú proceeded to tell Mùrén the story of the Ox herder, a simple Buddhist parable about a herdsman’s search for the missing ox, the journey he undertakes

to find the ox and then to return home with the ox, first in tow, but finally at peace with the large animal.

Mùrén: “I still don’t understand the relevance of this?”

Niú: “You need time to reflect, to reflect on the tale of the ox herder and your journey to find the answer you seek.”

With the parting comment Niú left. Mùrén, sat for a while pondering what Niú had said, before also leaving. He still did not understand why he had been told the story, nor how it related to quality in the slightest.

Quality as an Experience

> *“Quality is a direct experience independent of and prior to intellectual abstractions”* (Pirsig, 1991, p.54)

According to Pirsig (1974) an experienced Zen Buddhist, asking if one believes in Zen or believes in the Buddha, sounds a little ludicrous, like asking if one believes in air or water. Similarly, Quality is not something you believe in, Quality is something you experience. This view moves Pirsig’s Quality from being an event to being an experience. This shift in positioning is later demonstrated in his second book *Lila*. In this book, Quality is viewed as an experience in and of itself, with Pirsig referring to the works Kant, and text entitle the *Metaphysics of Experience* (Paton, 1961). What Pirsig was referring to was Kant’s Transcendental Idealism.

Within his Transcendental Idealism, Kant suggested that ‘all our knowledge begins with experience’, and further that if the thinking individual is removed then the material world must disappear, due to the fact that it is a construct created

by the individual (Kant, 1987). The understanding concept here is that experience of the world around us is based on how things appear to us, and not the things in and of themselves. If this concept is applied to quality, then the experience of quality is how it appears to the individual as an experience based on prior knowledge, and not a representation of quality itself. If Kant's line of reason is extended, the removal of the thinking individual will see the disappearance of quality itself, particularly as quality has already been established to have no physical form beyond that imposed on the object, service or event in questions.

Pirsig did not provide extensive detail on his new interpretation of quality as an experience rather than an event, beyond suggesting that no description can be given, beyond a mere indication of its value, high or low. Low quality and high quality are only referred to briefly in his 1991 text on pages 56 and 286 respectively. However, notion of divided quality in such a manner holds great potential in the formation of an applied model for the metaphysics of quality beyond a purely academic exercise. This notion will be explored in Thought Experiment Three below and within the next chapter.

Thought Experiment Three: Quality and the Cat Revisited

In the previous thought experiment (Thought Experiment Two) consideration was given to the perceived level of quality of an object before and after it was observed. This thought experiment propositions an extension of this to consider the level of quality of the object after the individual has interacted with it. Consider the object from thought experiment two for which you perceived a given level of 'Quality'. Now, consider that you interact with the object for a

given period of time. Now, consider if your initially perceived level of quality is the same or different after x period has passed.

As an example, consider the item in the box was a cupcake, on seeing the cupcake looking light, fluffy and sweet, your initial perception is that of a high-quality product. However, on sampling the cupcake, you find it to be dry and favourless. Now after your interaction with the product (tasting it) your initial perception has changed to that of a low-quality product.

This also brings about the concept of the depth of quality an object holds. At a surface level the object in question may or may not hold a high (positive) level of quality, however after the user has interacted and engaged with it this initial interpretation of quality level may change. For it is the experience of the user engaging with it that will determine its overall quality

Chapter Summary

This chapter has provided a deeper analysis of quality within the context of a metaphysical approach, as offered by Pirsig and covered in chapter three. The concept of Quality has been examined, initially, with reference to classical metaphysical works of Plato and Aristotle, and viewed within context of Theory of Form, taking into consideration both the Plato's and Aristotle's interpretation. This investigation has ventured further to include the work of Immanuel Kant, initially with his interpretation of Particulars or Universals. Following the further examination of Pirsig's writing in his second text, *Lila*, the focus has shifted to Quality as an event. Utilising Kant's transcendental idealism, it was then proposed that Quality is an experience, which was supported with the use of a thought experiment.

Chapter Five: Neo-Metaphysics of Quality

(van den Dungen, 2016, p. 42)

VII. The Bull Transcended

Astride the bull, I reach home.
I am serene. The bull too can rest.
The drawn has come, In blissful repose,
Within my thatched dwelling
I have abandoned the whip and ropes.
(Koller, 2016, p.6)

The purpose of this chapter is two-fold: firstly, it will introduce the concept of Quantum Quality as a potentially new era of quality management, and secondly, fundamental quantum mechanics principles will be given as a method of examining the neo-metaphysical model of quality which is being proposed. As a natural extension of the thought experiments which have been used to express how individuals perceive and interpret quality, parallels can be drawn between this analysis and our current understanding of quantum mechanics, not necessarily as a physical representation but as a form of analogy. This will be referred to as the theory of quantum quality. The word 'quantum' is derived from Latin word *quantus* meaning 'how great' (Brewer, 2001).

Quantum Quality

The use of the term 'Quantum Quality' is not new, having been previously used by Miller (1993) in his book entitled *Quantum Quality: Quality Improvement through Innovation, Learning and Creativity* as well as in other quality management literature (Mulky, 2001; Youssef, 2001). Miller suggests that quantum quality does not contradict the basics of its forerunners, such as quality control, quality assurance and total quality management (as discussed in Chapter two), but instead builds on them. Business excellence can also be added to the forerunners mentioned but was not a recognised step in the evolution of quality at the time of the book publications. Youssef (2001) referred to inclusion of quantum quality as a paradigm shift 'from Total Quality Management to Quantum Quality' (p. 535). In the content of this thesis, the quantum quality will be used to explain how we should view quality and how quality 'behaviour' in relationship to the items on which is it perceived. This will build on the thought experiments already discussed.

Quantum Mechanics Overview

The purpose of this section is to provide an overview of quantum mechanics, from a conceptual perspective. The mathematics and computations processes are beyond the scope of what is required within the context of this thesis. Although there have been positional statements made that there is no philosophy in quantum mechanics (Rave, 2014), other scholars (Wallace, 2016) consider philosophy to be a critical element to the study of this discipline. d'Espagnat (2018) in his text *Conceptual foundations of quantum mechanics* refer to the works of Plato and Spinoza with reference to their development of models based on the real world in their consideration of reality and the nature of Being. Further the nature of dualism is discussed, as a reflection of super-positioning, a term in quantum mechanics which will be explored, and is reflective of Pirsig's Dualism within his metaphysical model of quality. The purpose here is to consider the quantum mechanical processes with an analogy to help explain how 'quality' behaves.

Quantum mechanics is a fundamental physics theory that describes the nature at its smallest possible level, atoms and subatomic particles (Feynman, Leighton & Sans, 1864). It is a relatively small topic within the scientific discipline of physics. The foundation of quantum mechanics was developed in the early part of the 20th century by notable physicists including Planck, Bohr, Einstein and Schrodinger.

Quantum mechanics, as a general rule, does not assign definitive values to measured objects, instead it offers predictions using a probability distribution of potential observable outcomes.

Superposition

Within quantum mechanics quantum superposition refers to the principle that any two, or more, quantum states can be added together to result in another valid quantum state, or more simply that every quantum state can be represented as two or more distinct states. This moves us away for the binary relationships commonly held, such as 0 or 1, or yes or no, to a position where objects can have two or more states simultaneously, such as 0 and 1 or yes and no. This principle was demonstrated in the above thought experiment which was a variation on the original thought experiment by Schrodinger.

In its essence the principle is applied here to the concept of quality, as before when the quality of an item is observed or interacted with it remains in a state or flux, as suggested by Pirsig. This state of flux has been refined in this investigation into two categories low and high. The depth of the flux, from surface level to the deep level can only be determined by interactions with the item on the level where quality is being considered.

As an example, consider the scenario as it occurred in Chautauqua One, based on the properties of quantum mechanics discussed so far, the book of reading when still sealed in its packaging held the quality state of holding both low and high surface quality and low and high deep quality. This quality was in a state of flux and based on Pirsig's approach, all four stated appear simultaneously, from a quantum mechanics position. Once the package was open, Mùrén observed the first of book of reading and the first quality state manifested. The quality of the book of readings shifted from a state of flux, or from a quantum state to a fixed state, which Pirsig would refer to as a static quality state. In the proposed model this state would be surface quality.

Low Surface Quality	High Surface Quality
Low Deep Quality	High Deep Quality

Figure 17. Neo-Metaphysical Model of Quality

Observer Effect

Observation is a critical aspect within science, social science, and certain humanitarian disciplines (de Bianchi, 2013). It's a key method by which we, as humans, obtain information and knowledge about our reality. As de Bianchi (2013) clearly states 'observation is not interpretation' (p. 214), in that how we discuss and draw conclusion about what we observe is a separate concept, which will be discussed later. Hurst (2011) provides a clear and simple explanation of the observer effect. The observer effect is a theory within physics that states that the simple observation of a situation produces a phenomenon which changes the state or nature of the situation under observation. Within physics this is stated to be the result of instrumentation that is used to measure the phenomenon under investigation. Within the context of the thesis, as an individual is involved in the quality measurement process, it would be that individual who is altering the initial quality state. This explanation suggests that in quantum mechanics the 'observer effect' supports, at a superficial level, that reality is mind-dependent (Squires, 1994).

de Bianchi (2013) suggests that the observation of object not only detects the presence of a pre-existing physical system, but that this process can provoke a change within the object and therefore the idea of transformation needs to be taken into consideration. In the context of this work the idea that the act of

observation impacts on the ‘quality’ of the object under observation. This leads to the concepts of observers as being either non-invasive or invasive, in that they impact directly on the item under observation. If the former is the case, that the individual discovers the property or object through non-invasive observation then the act of observation has no bearing on what is being observed. As an example, the observation of a tree as the result of light reflecting off it which is collected by the eye of the observer (de Bianchi, 2013, p.219). If the latter is the case, that the individual discovers the property or object through invasive observation then the act of observing has a direct impact on what is being observed. de Bianchi (2013) offers the example of observing the ‘floatability’ of a piece of wood. In this case, the dryness of the wood is, albeit temporal, changes as the wood becomes wet.

The concept of invasive observation could be further extrapolated beyond mere discovery to include invasive creation observation and invasive destruction observation. However, only the former is of interest within scope of the current investigation. The suggestion here is that the act of observation creates the property or item which is under observation. For example, is quality, as the item under consideration, being created through its observation and the level of quality the item being identified. That is, does the item hold low or high quality? In the case of quality, at the surface level the observer creates the degree of quality perceived within the item or has a direct influence on the quality of the observed item and in effect create the level of quality. To counter this position, one could argue that to remove the observer would be to remove the quality of the item, in that, if there is no one to observer the quality then the quality ceases to exist in its current state and would return to the superposition of being both high and low

surface quality until observed again, either by the some individual or someone else.

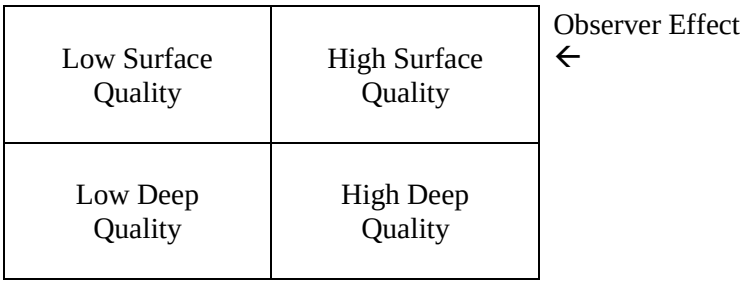


Figure 18. The Observer Effect in the Neo-Metaphysical Model of Quality

The Interaction Effect

As an extension of the observation effects as discussed for quality the same logic can be applied to the interactions between the individual (observer) and item, service or activity. This interaction can also affect the perceived quality of the items, this will be called the Interaction Effects. This effect not only has the potential to change this perceived quality of an item, service or activity, but will also move the level of the quality from the surface level to the deep level as shown in the figure below. The shift from a surface level exposure to a deeper level is the result of time. The more time an individual is exposed, the greater the interaction and subsequently the greater and stronger the perceived level of quality.

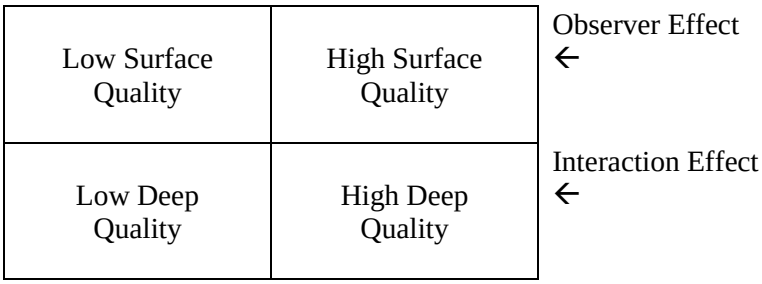


Figure 19. The Interaction Effect in the Metaphysical Model of Quality

The Problem of Measurement – Part One

A logical extension of both the observation effect and the interaction effect is the measurement problem as described by de Bianchi (2013) and Wigner (1963). The observer is intimately linked with the object or property under observation, in that until an observation is undertaken the object or property being observed is in a state of flux, as suggested by Pirsig, or in the terms of quantum mechanics analogues holds a superposition. On observation, this state of flux, or superposition, is fixed by the observer in a measured state or it collapses into the state determined by the observer. It is not until this point that, in the case of quality, it exists within our reality, unlike physical objects which hold a state of object permanence. Further, once the observer identifies quality, judgement measures are taken as to what level of quality the object holds. On the commencement of measuring quality, it, as a concept, starts to break down in that individual components start to be examined at the surface level of quality. This is what Pirsig refers to as the intellectualisation process and is one of the features he identifies as to why quality cannot be defined.

As an example, consider the book of readings for Chautauqua One. As has already been discussed on observing the book of reading by Mùrén, the first quality state manifests itself, as in the previous non-observed state of flux coalesces. Once this occurred, Mùrén unconsciously started to intellectualise quality through the application of expected standards based on previous experiences. Standards and expectations, such as how the book of readings should be constructed, how is should be laid out, what type of articles should be within the book or readings and so on. The measurement of quality is now not a

measurement of quality but rather a measurement of the expected individual standards and rather than being quality as the sum of its parts, its simply the parts which are being measured. ‘Quality’ as an entity or in classical philosophy terms its Form has broken down and no longer exists. This is reflected in Banach (2006) properties of the Form which depicted Material Objects to be a sub group of the Form of Good (Figure 14).

Thought Experiment Four: A Heap of Quality

When does a heap become a heap, when does low quality become high quality or when does surface quality become deep quality? The sorites paradox, also referred to as the paradox of the heap, is the paradox that arises due to the vagueness of the language used or in this case of quality, the inability to clearly articulate specific amounts. In the original paradox, proposed by Eubulides of Miletus, a heap of sand is central to the inquiry, from which individual grains of sand are systematically removed (Kim, Sosa, & Rosenkrantz, 2009). The basic assumption offered is that the removal of a similar gain of sand will not turn the heap into a non-heap. However, if this act is repeated multiple times at what point is the heap not considered a heap? What is of critical consideration within this paradox is the tension of change, big or small, within the object/entity under examination. The logical construction of this paradox can be repeated with a number of alternative predicates, such as small, tall, poor or rich. Consider richness, at what point does ‘rich’ occur, or with a qualifier, very rich or highly rich. Where is the point of transition from one to the other, or when does the tension of change occur? Consider Quality, at which point do we consider low quality to become high quality, or in fact at what points does high quality become higher quality, or low quality become lower, as an individual interacts with it?

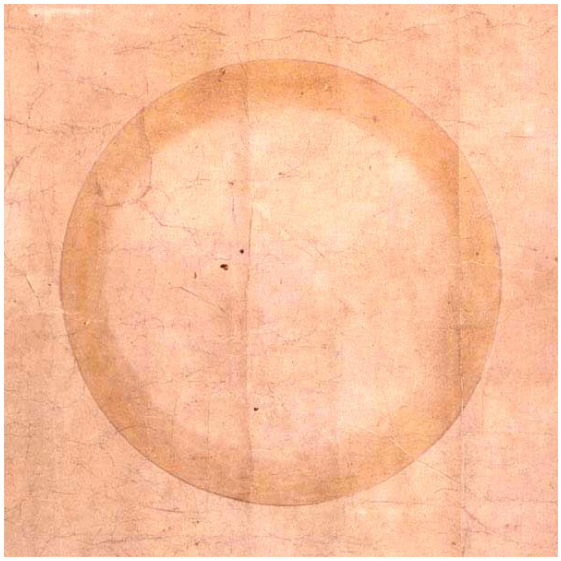
The Problem of Measurement – Part Two

Quality, so far, has been categorised into high and low, surface and deep as shown in Figure 17. The categorisation of quality has all been said to hold a superposition until the point that it has been observed (observation effect) and/or interacted with (Interaction effect) at which point the first measurement problem occurs, as described above. However, under the logical of the sorites paradox a second measurement problem presents itself.

Chapter Summary

This chapter has investigated the use of basic quantum mechanic principles as a means of further conceptualising the neo-metaphysics of quality and allowing for the development of a theoretical model which could be used within the 'real world'. Through this process two measurement problems have been identified which highlight, what could be seen as the fundamental issues with the assessment and measurement of quality. These are referred to as the observation effect and the interaction effect, both of which mirror the observer effect in physics (Weizmann Institute of Science, 1998).

Chapter Six: Zen, the Ox Herder and Quality



(van den Dungen, 2016, p. 47)

VII. Both Bull and Self Transcended

Whip, rope, person, and bull –
All merge in No Thing.
This heaven is so vast,
No message can stain it.
How may a snowflake exist
in a raging fire.
Here are the footprints of
the Ancestors.

(Koller, 2016, p.6)

When you consider quality within the polytechnic and private training sector, no programme should demonstrate this more that the academic apex of doctorial research. If experience is the driver for the identification of quality, then the experiences encountered within this course of study should provide an excellent example of application. Moreover, it is the view of the author that a quality doctoral programme will instil change and lead itself to the cognitive transcendence of the individual undertaking the study. The individual should grow academically, professionally, and potentially personally.

Within this chapter, we will move away from the narrative currently presented to consider the journey and experience of undertaken doctorial study, with reference to Zen and the journey of Zen practitioners towards enlightenment. What is proposed here is a similarity in phases both journeys undertake (doctorial research and the search for enlightenment), not that both activities are of equal standing. Zen practitioners may for years seek enlightenment and not obtain it. The inclusion of Zen and Eastern philosophy here is as an acknowledgment to the role which Eastern philosophy played in Pirsig's development of his Metaphysics in Quality.

What has been presented throughout this thesis is the story of the ox herder, both as a framework for the presentation of the thesis, as well as within the Chautauqua provided to illustrate the issues with quality within the polytechnic and private training sector. Each will be discussed in turn.

The Ox Herder

The story of the Ox herder is one which illustrates the journey of Zen practitioners towards enlightenment. The story comprises of ten pictures and short poems depicting the journey the ox herder takes to seek out, find, tame and return

the ox. This is representative of the individual (the ox herder) and enlightenment (the ox). In the context of this thesis, the ox herder is a theoretical representation of the author and the ox of the concept of quality which he seeks. The chapters have therefore been structured as a representation of this journey as demonstrated by the pictures and poems at the start of each chapter.

In Search of the Ox

At first the ox herder seeks to find his missing ox and searches everywhere in desperation for it. The Zen interpretation here, as given by Koller (2016), is that the individual, the ox herder, is dissatisfied with his life and is unable to find the happiness that he wants, with his gains in wealth, friendship and family not achieving this. And yet he is unsure what he is seeking will bring him the happiness he is after. In the context of this thesis, at the initial stages of Chapter One the author is unhappy with his view on Quality, and moreover, how Quality has been presented to him. Yet, he is unsure what it is he is seeking other than a greater understanding and awareness of Quality in the context of the polytechnic and private training sector.

Discovering the Footprint

Within the second illustration and poem, the ox herder finds signs of the animal, which brings hope to the ox herder that all is not lost, and he will be able to reclaim the ox he seeks. Koller (2016) interpretation of this is that the individual has acknowledged his personal distress and how now he begins to seek a solution to it, yet the problem is not well defined, and he needs to talk to many others and identify possible solutions, as he has no clear pathway forward. Within this thesis Chapter Two offers identification of various approaches to quality

management which have been practised over the course of history, offering ‘hope’ that a solution can be found. However, the quality theories and models of practice offer no clear solution to the issues identified by the author. Quality, as a concept, has been alluded to but not clearly identified, just as the ox footprints have been seen the ox itself remains a mystery.

Perceiving and Catching the Ox

The third poem and illustration depicts the ox herder catching sight of the actual ox, as opposed the mere suggestion of its existence. From the Zen perspective, Koller (2016) suggests that the individual who now senses what he seeks is at this stage unaware that what he has been seeking has always been within his experience of ordinary everyday things. Within the fourth poem and associated drawing, the ox herder, now catching hold of the ox used a rope to control its great power. Koller (2016) suggests that the power of the ox is representative of the power of the potential transformation which lays within the individual (the ox herder) himself. And the rope is symbolic of the hard work the individual must undertake to overcome previous thoughts and behaviours to embrace change. Chapter Three of this thesis provides the initial description, and examination of Pirsig’s metaphysics of quality, a framework which offers a contextualisation of quality beyond those given by other quality gurus, as presented in chapter two. Pirsig’s view therefore goes some way to addressing the philosophical concept of quality being sought by the author and indicates the shift in thinking required to explore quality from a metaphysical perspective.

Taming the Ox and Riding the Ox Home

Presented in the fifth image and poem the ox herder has now tamed the ox and, according to Koller (2016) the individual has overcome previous bad behaviour allowing them to become one with the "true nature of reality" (p.5). The ox shows a willingness to follow the ox herder, demonstrating that separation between the two has been overcome. The individual has become one with true reality. The sixth illustration and poem offers an extension to the fifth, whereby the ox herder and ox journey as one, free from fear and anxiety which allows of the ox herder to "express his creative energies" (p.5). The Fourth Chapter presented in this thesis, offers a deeper examination of metaphysics to understanding the thinking required in order to conceptualise and recreate Pirsig's approach to quality. The in-depth understanding generated within this thesis allows for creativity to occur and for quality as an event to be considered as quality as an experience.

The Ox Transcended

The seventh drawing and poem depicts that the ox herder understands his relationship with ox, and the ox can now be forgotten. From a Zen practice perceptive, the image and narrative represent the realisation that ordinary reality and the ultimate reality are not separate entities, the individual need now practice meditation to achieve enlightenment (Koller, 2016), the practice itself is to realise enlightenment, the two are interwoven. Within Chapter Five of this thesis a different interpretation of transcendence is taken and ox (metaphysic of quality) is not forgotten but rather extended upon. What is proposed is a revised interpretation of Pirsig's model coined the 'Neo-Metaphysics of Quality'. This

model is proposed under a new era of quality management referred to as ‘Quantum Quality’.

Both Ox and Self Transcended

The eighth poem and image shows the duality of the self and reality, as symbolised by an all-encompassing circle of emptiness, the interconnectedness of all experiences. The ox herder, now, is not only connected with the ox, but with all things. The current chapter presents the alignment of the Ox herder story with the structure, and more importantly the journey the author has undertaken in the development and construction of the investigation into quality presentation within this thesis. It demonstrates the connections between the Ox herder story, the series of Chautauquas which have been provided and the topic under investigation.

Reaching the Source

Within the ninth picture and poem, both the self and reality are left behind, they are the things that they are in and of themselves, constructs of reality. The ox herder in seeking the ox has constructed their view of reality through experience. Within this thesis, quality is conceptualised as resulting from the experience and individual has with the objects or events they encounter. Such examples are given in chapter seven. This understanding of quality has been reached only by the author seeking quality as a separate entity. Could the discovery that there is no separation being the objective on which quality is perceived and quality itself be made? Quality cannot exist within reality independent of the object or service on which it is perceived.

Return to Society

The final image and poem shows the return of the ox herder, now enlightened, back to the marketplace. Once there he shares his experiences and creative learnings with those around him. The ox herder has changed and is now happy with his place and has obtained the happiness he sought in the first image and poem of the ox herder story. Chapter Eight of this thesis offers the conclusion of this inquiry into the quality within the polytechnic and private training sector and returns to 'marketplace,' in which it started to suggest how the proposed neo-metaphysical model of quality could be applied to quality within the New Zealand educational context.

Chautauqua Six

Actors:
Mùrén, Niú

Mùrén continued in his search to find out the meaning of quality in the polytechnic and private training sector. He continued to read, to talk with various staff and attended training sessions offered on quality management, however, he felt he was getting further away from what quality was. The whole time in the back of his mind was the story of the Ox herder that Niú had told him. How was this story relevant to his enquiry? So perplexed Mùrén was with this he sorted out the original Ox herder poems and read them in detail. As he saw it, the ox herder was on a journey to find the ox and return with him home. Was this what Niú was referring to, was Quality in fact Mùrén's Ox? With this in mind, Mùrén reflected on the journey he has taken so far in his search for quality.

The first time Mùrén could remember considering quality was back when he started teaching and the conversations he had with other staff about the quality of the teaching resources (Chautauqua One). His focus here was solely on the quality of artefact and how the quality of the object had made it past the detection of any form of quality control measure (Figure 20).

Figure 20. Garvin's Evolutionary Model of Quality Revised - Quality Control Revised.

He then considered his early involvement with the institute's quality unit (Chautauqua Two) and his questions regarding the quality assurance mechanisms (Figure 21) they had in place to ensure consistence across programme and academic staff.

Figure 21. Garvin's Evolutionary Model of Quality Revised - Quality Assurance Revised

Mùrén reflected on the challenges he had encountered with the division of educational services and products (Chautauqua Three) under a total quality management model (Figure 22) and more importantly how his thinking had moved from a simple consideration of the quality of an idea (Chautauqua One) to one where multiple aspects of quality as an experience of the consumer where being considered. Mùrén was starting to wonder if quality was more than a series

of criterion which needed to be met in order to meet the standard required. Was this why quality was become so difficult to identify?

Figure 22. Garvin's Evolutionary Model of Quality Revised - Total Quality Management Revised

Finally, Mùrén contemplated his appointment within the quality unit as an advisory role (Chautauqua Four), where they shifted the organisation's quality management system from one based on a Total Quality Management conceptual framework to a Business Excellence model (Figure 23) for a whole organisational approach to quality management.

Figure 23. Garvin's Evolutionary Model of Quality Revised - Business Excellence Revised

From what Mùrén knew of the history of quality management (Chapter Two), he could identify that his own consideration of quality followed a similar path. As the concepts of quality had evolved over time so too had his own understanding and approach to quality from the notion of simply ensuring consistence to the desire to strive for excellence. However, he wanted to push beyond this as he was still not satisfied with his understanding of quality. Mùrén wanted a quantum improvement, a term he had picked up from the works of

William Miller, which would move quality forward with a clearer understanding of quality from a philosophical perspective.

Figure 24. The Introduction of Quantum Quality as New Stage of Quality Management

Mùrén continued to reflect on what Niú had said, the story of the ox herder, the journey the ox herder had taken, how the ox herder sought the ox only to discover once the ox had been found that the journey had provided what he was after, and not the ox who he let free. Mùrén thought what if quality was not a thing or an object? What if quality was a journey: the journey of experience that the individual had with item or activity? Mùrén, stopped, it was as if a light had come on, he could see Niú's point. In his own journey to uncover what quality was he had been experiencing it the entire time. At each step of his journey he had given his perception of quality, his view of reality, as those around him had done also (Thought Experiment One – Three). This is why there had been no agreement on what quality was, beyond the criteria and standards set to measure (Thought Experiment Four).

Mùrén had a feeling of relief flow over him, as if a weight had been lifted from him. Finally, he was happy with his interpretation of quality.

Chapter Summary

This chapter has served as a connection point for two of the key elements of Pirsig's original works, *Zen and the art of Motorcycle Maintenance*; the use of

Chautauqua as a means of educationally storytelling and the Zen practice, which formed a cornerstone of his philosophical practice.

The Chautauqua illustrated in this text the journey of an individual in his quest to understand quality as a concept. It demonstrates the developmental stages which quality management has taken over time and is reflective of the history provided in chapter two. Further, it demonstrates the shift and development in his thinking as he moves through the stages of realisation which is somewhat reflective of Zen practice, although not as clearly demonstrated as is shown by the structure of this thesis.

The structure of this thesis has been deliberately constructed to reflect the Zen story of the Ox Herder. This philosophical frame has been carefully followed to serve as a method of inquiry for the investigation into the metaphysics of quality and can be view as a mirror to the journey Pirsig himself undertook. It offers structure to the journey and philosophical ‘story’ being told.

Chapter Seven: Application of Neo-Metaphysics of Quality

(van den Dungen, 2016, p. 52)

IX. Reaching the Source

Too many steps have been
taken
returning to the root and the
source.
Better to have been blind and
deaf
from the beginning!
Dwelling in one's true abode,
unconcerned with and without –
The river flows tranquilly on
and the flowers are red.

(Koller, 2016, p.7)

This chapter will explore the application the theoretical model of a neo-metaphysics of quality, as suggested in Chapter Five, to a series of educational situations in which one may wish to determine the perceived level of quality. Once this has been undertaken the theoretical model will be applied to various areas external to education to determine its robustness and thus the potential of its application beyond the field of education.

Example of Application within Polytechnic Sector

Example One: Quality of Educational Artefacts

If we consider an educational artefact on which quality can be applied, we can explore how an individual could experience it in terms of the neo-metaphysical model of quality which has been proposed within this thesis. To demonstrate the application of the model, focus will be given to Mùrén's experience of the book of reading given in Chautauqua One. This will also illustrate how the previous experiences of the individual can influence current experience.

Mùrén, having been a student himself and having seen numerous books of reading over the course of his educational life, already had a predetermined idea of how the book of readings should look and what it should contain. This previous experience cannot be removed from influencing how he will perceive the current interaction. Mùrén's first interaction with and experience of this book of readings in chautauqua one generated an immediate low-quality response with the book not meeting his predetermined idea how it should be presented. As he interacted with it the concept of quality shifted to the identification of various standards he expected to find. Any measure at this point would be a measure of the standards and not of quality.

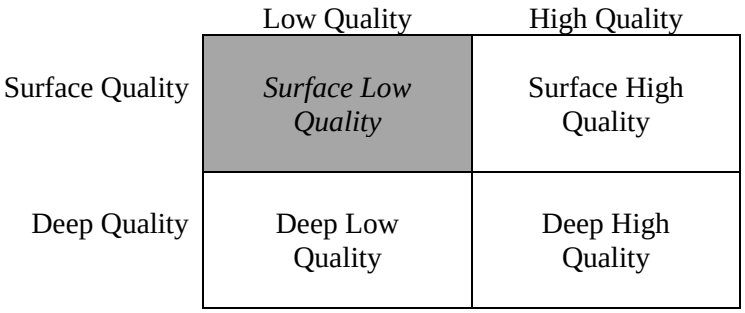


Figure 25. Application of Neo-Metaphysical Model of Quality to an Educational Artefact – Surface Low Quality

If we speculate beyond the chautauqua and extend Mùrén's interaction with the book of readings, we can explore the potential for a deep quality experience occurring: If it was the case that once Mùrén started to read the articles held within the book of readings he found them to be irrelevant and of no help to his studies, then his experience beyond the initial exploration would shift past surface quality. However, this experience at a deeper level may still be poor.

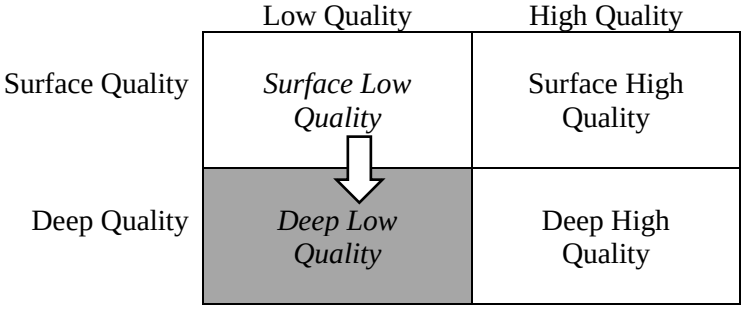


Figure 26. Application of Neo-Metaphysical Model of Quality to an Educational Artefact – Deep Low Quality

Now, if we speculate that on continued interaction with the book of reading that Mùrén found them to be interesting and beneficial to his study, this continued experience would shift his initial surface poor quality to a deep high quality interpretation.

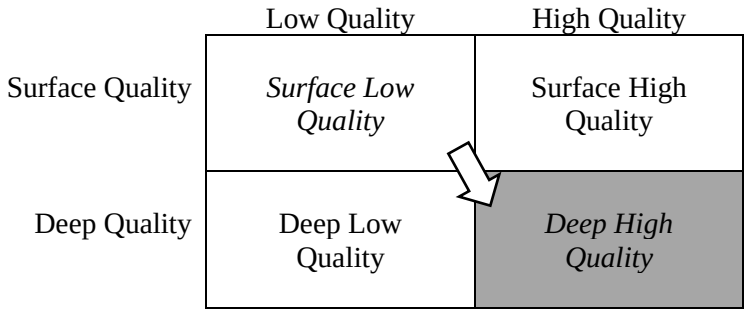


Figure 27. Application of Neo-Metaphysical Model of Quality to an Educational Artefact – Deep High Quality

In either of the cases stated above if Mùrén started to measure or quantify why his experience (deep low quality or deep high quality) was the case, quality itself would again break down into the individual elements that he was assessing against. As an example, the standardisation of page formation, the darkness of the text for reading, and so on.

If we apply the same conditions to another individual who has no previous experience or exposure to books of readings, there is potential for a different set of results to come from the experience. Let's say there is another individual who has not studied and has no previous experience within education beyond high school, further say the individual is attending a polytechnic and private training provider straight from high school. Their experience of same education artefact may be different from that of Mùrén, but their experience of quality is no less important. Suppose that when receiving the book of reading their initial experience leads to a surface high quality response, which in turn leads to a deep high quality response.

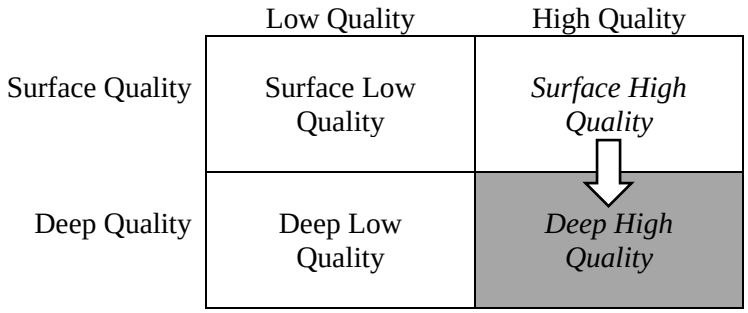


Figure 28. Application of Neo-Metaphysical Model of Quality to an Educational Artefact 2 – Deep High Quality

Now, suppose this same individual, after three years of study and exposure to numerous books of readings happens upon the original book of readings that he received and on re-reading determines it to be low quality based on their newer experiences. This demonstrates the fluid nature of quality across experiences and time.

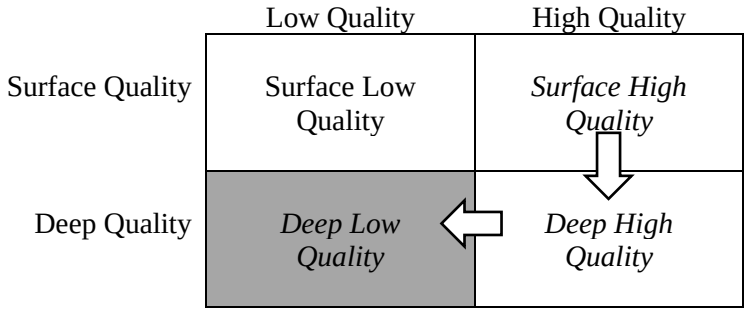


Figure 29. Application of Neo-Metaphysical Model of Quality to an Educational Artefact – Surface to Deep High Quality to Deep High Quality

Example Two: Quality of Educational Programmes

If we explore an educational course (paper) in the context of quality, we can again consider how individuals experience it in terms of the neo-metaphysical model of quality under consideration. Consider the second story in which Mùrén

encounters a course where all the students received an A grade, but from the perspective of the students.

From the student's perspective they may, based on their A grade perceive the course as deep high quality, irrespective of the course content and solely based on the experience of receiving a high grade. No doubt the lecturer would have received positive feedback, particularly if this feedback was sought after the final grades had been release. In this instance any 'quality' or evaluative measures taken would be against a set of pre-set standards or criterion. The result of which would reflect responses to those elements and against the quality as an experience of the individuals.

	Low Quality	High Quality
Surface Quality	Surface Low Quality	Surface High Quality
Deep Quality	Deep Low Quality	*Deep High Quality*

Figure 30. Application of Neo-Metaphysical Model of Quality to an Educational Programme – Deep High Quality

At this stage the initially perceived quality of the course is not relevant due to the period of time which has passed and the amount of experience each individual has had with the course. However, if we take a step back and consider the possible perceived quality of the course prior to the grades being given a different picture may emerge.

Supposed Student A found the course to be challenging but enjoyed the topic and found the course content to be interesting and relevant to her future career goals, then she may view the course as deep high quality. Whereas, Student

B, who also finds the course challenging, does not enjoy the class and sees no benefit in it has the opposite experience with the course for them being deep low quality. What we can see here are two opposing views for the same course based on individual preference and experience.

	Low Quality	High Quality
Surface Quality	Surface Low Quality	Surface High Quality
Deep Quality	Deep Low Quality	*Deep High Quality*

Figure 31. Application of Neo-Metaphysical Model of Quality to an Educational Programme for Student A – Deep High Quality

	Low Quality	High Quality
Surface Quality	Surface Low Quality	Surface High Quality
Deep Quality	*Deep Low Quality*	*Deep High Quality*

Figure 32. Application of Neo-Metaphysical Model of Quality to an Educational Programme for Student B – Deep Low Quality

The view of Student B, is, as with all of us, in a state of constant flux. Consider the open preface in this example, that all students received an A grade. With this in mind it is highly probable that the view of the student regarding the quality of the course could shift from deep low quality to deep high quality based on the experience of receiving an A grade, be the grade warranted or not.

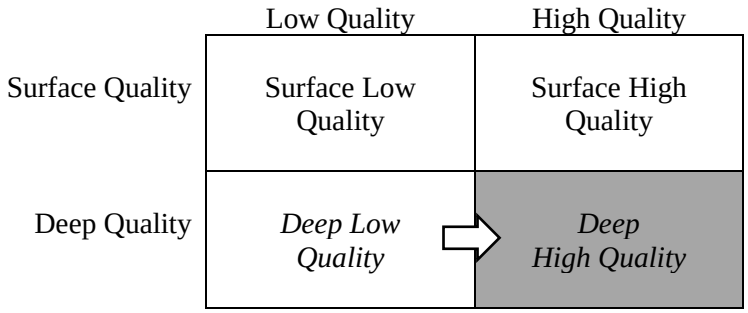


Figure 33. Application of Neo-Metaphysical Model of Quality to an Educational Programme for Student B – Deep Low Quality to Deep High Quality

Now let us consider a different course, one, which Student C did not enjoy, nor see the relevance of. For the sake of this example, let's make it an Introduction to Statistics course for a student (Student C) undertaking a Bachelor of Arts in Sociology. Initially, even though Student C saw no value in the course, their understanding and previous experience of the educational course may have lead them to have a surface high quality view of the course. It is important to note that we are not implying that value and quality are the same thing. The value placed on an experience or objective is to be seen as independent of its quality. As an example, a student may have a negative or poor quality experience but place high value on it due to the learning they gained from it, or high value maybe placed on an object of perceived low quality for personal or sentimental reasons. Over the duration of the Introduction to Statistics course Student C's experience with the content or teaching staff or a combination of other factors may lead the initial high surface quality to shift to deep low quality position.

Now, suppose that on graduation Student C gains employment with a company and is tasked with the collection and basic analysis of customer data, for which they need to employ statistical techniques and skills. Drawing on the

learning they have gained in the Introduction to Statistics course they are able to successfully undertake and complete this task. As successful learning occurred in the course, Student C may now consider that course to be of high quality. Again demonstrating the fluid nature of quality over time and experience. In this case the additional experience of being able to successfully use the statistical techniques and tools learnt outside the educational environment shifted their perception of the courses quality.

Example Three: Lifelong Learning

Let us now consider learning beyond the context of the polytechnic and private training sector provide. Learning that occurs, or that can be stimulated, in one's professional or personal life. To explore the potential quality of lifelong learning in the context of the model of neo-metaphysics of quality, let's now consider the journey of Mùrén, as given in chautauqua five.

In this case, it could be speculated that based on Mùrén's early concerns and frustrations surrounding his quest to determine what quality in the polytechnic and private training sector was, or if in fact there was such a thing as quality at all, his initial perception of this particular lifelong learning path may have been Surface low quality.

	Low Quality	High Quality
Surface Quality	*Surface Low Quality*	Surface High Quality
Deep Quality	Deep Low Quality	Deep High Quality

Figure 34. Application of Neo-Metaphysical Model of Quality of a Lifelong Learning Experience – Surface Low Quality

Further into his journey it is conceivable that through the continued experience of frustration and the general inability to find an answer would have led to a perceived deep low quality state. And yet throughout this seemingly negative experience he continues to seek an answer. As the chautauqua continues negative experience could be interpreted as playing a critical role in the learning process, resulting in a realisation that even a perceived low quality experience in fact can lead itself to a deep high quality result. This again demonstrates the dynamic nature of quality and the fluidity with which it can change under different conditions and across different time periods.

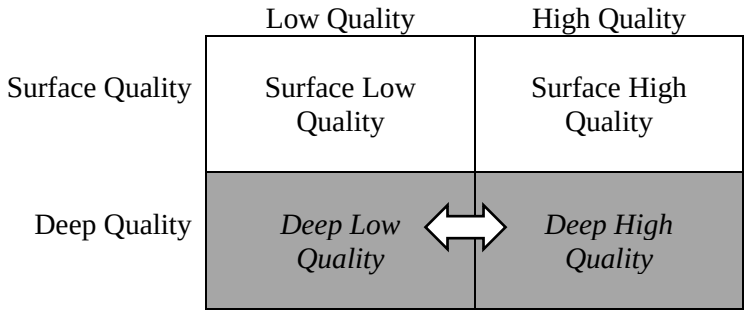


Figure 35. An Illustration of the Fluidity across Levels within the Neo-Metaphysical Model of Quality

Example of Application outside Education

Pirsig (1974) did not look at quality outside the immediate classroom experience, however, in order to test the robustness of the proposed theoretical model for the neo-metaphysics of quality it can now be applied to areas outside education just what the quality of artefact or service may be considered.

Example Four: Quality of Services

One of the principles that are the target of quality management is that of services provision, where the customer experience is paramount. Hotels, as with

other service providers strive to provide high quality experiences to ensure continued and repeat custom. The initial experience with a service, if good will result in a high surface quality interpretation on the part of the service user. The high surface quality perception can be achieved in a number of ways which will not be entered into here, beyond that the service user has a positive experience. As with education, any attempt to measure the initial quality of the services provided will result in the measurement problems, as the measurement of quality gives way to the measures of various standard and predetermined criteria, such as response time to attend to a customer's need. However, the service user will still form the initial opinion about the quality of the service they receive.

	Low Quality	High Quality
Surface Quality	Surface Low Quality	*Surface High Quality*
Deep Quality	Deep Low Quality	Deep High Quality

Figure 36. Application of Neo-Metaphysical Model of Quality of Services (General)– Surface High Quality

As with education, as the experience of the individuals continues their perception and experience of quality deepens. Depending on the individual's experience, albeit positive or negative, their perception of the quality will be in a state of flux resulting in either a deep low quality experience or a deep high quality. What is depicted below is a shift from an initial surface high quality perception through a negative experience resulting in a deep low quality result.

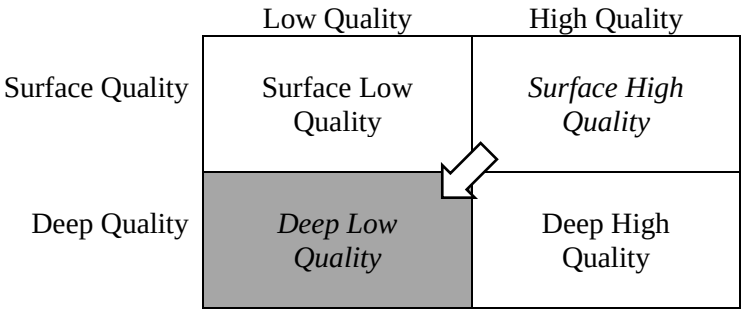


Figure 37. Application of Neo-Metaphysical Model of Quality of Services (General)– Surface High Quality to Deep Low Quality

Example Five: Quality of Product

Another area which received high levels of attention within quality management is that of products and goods. The area covers a large range of items from food stuffs through to electric appliances, to vehicles. For this example, consider an individual purchasing and using a new mobile phone. Similar to the book of reading in chautauqua one, on opening the packaging and seeing the new phone the experience of the individual is likely to be expressed as surface high quality, assuming the packaging has not been damaged which may alter this initial interpretation.

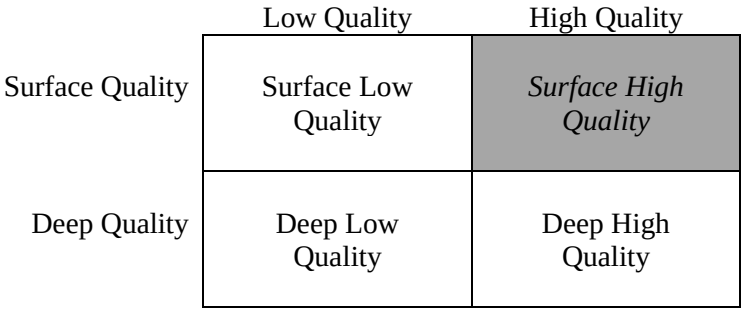


Figure 38. Application of Neo-Metaphysical Model of Quality of Products (General) – Surface High Quality

As the individual uses the phone their experience of the product will deepen and there will be the shift from surface to deep quality. Depending on the

experience the level of quality (low or high) will be established. Let's assume that the individual has a good experience with the phone.

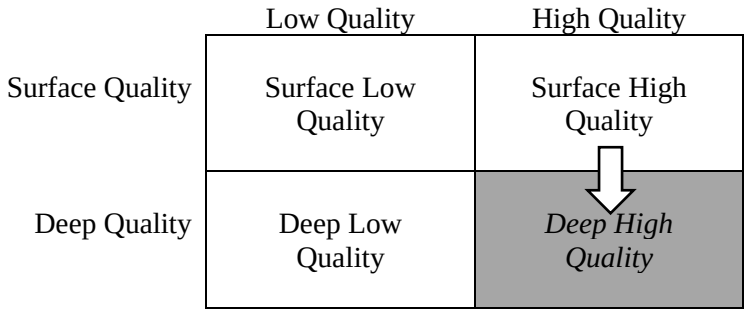


Figure 39. Application of Neo-Metaphysical Model of Quality of Products (General) – Surface High Quality to Deep High Quality

These is the possibility that over the product's life-cycle the interaction and associated experience will change and therefore the perceived level of quality will change, similar to example three above.

Discussion on Application

What has been demonstrated in the examples provided is the application of the proposed theoretical model neo-metaphysics of quality to several the polytechnic and private training sector and non-education areas in order to test is robustness and rigidity. Through this application, the fluid nature of quality, in the context of this model, has been demonstrated. This reflects, in practice, the conclusions reached through the thought experiments. The 'quality in a box' thought experiment (thought experiment 1) implied that all individuals have a different perception and interpretation of quality. This difference can be seen in example 1 and example 2 above, where two individuals have, through their experience, interpreted the level and depth of quality differently. This also highlights the measurement problem, both for surface and deep quality. Further, the transition from surface quality to deep quality after the initial exposure and

formation of a perceived level of quality on the part of the individual, as shown in all the examples, provides a practical demonstration of the potential outcome of thought experiment two (quality and the cat). Once more, measurement problem one is highlighted, for any attempt to examine and quantify surface quality breaks down into the examination of its component parts. This again becomes an issue at the deep quality level, with the measurement problem occurring again. Example three, provide an example of measurement problem two, with the fluctuation between low and high quality at the deep level. The potential for fluctuation in this example provides a practical demonstration of the problem encountered in thought experiment four (a heap of quality). This issue being, if quality breaks down on examination, how can a clear distinction be made between where low quality ends and high quality begins.

The Measurement Problems Revisited

In the examples above the two measurement problems which were identified in Chapter Five have been highlighted in a practical context. In this section the two measurement problems will be revisited, and solutions proposed. The two measurement problems described in Chapter Five are a direct result of the Observer Effect as demonstrated in Example One and Example Two above and in Interaction Effect as shown in Example One and Example Three. To address both this Observer Effect and the Interaction Effect the application of fuzzy logic and the concept of group consensus are exampled.

The first proposed solution involves the application of fuzzy logic (Smith, 2008, Zadeh, 1975); in this case the measurement problem (Measurement Problem One) is viewed as a problem in bivalence, either the object or service is low quality or high quality, that is it holds one of two potential states logical (0, 1)

at a surface level. The same logic can then be applied to the deep level, the object or service is either low quality or high quality (0, 1). The concept of fuzzy logic offers a continuous spectrum of logical states to present the binary values (0, 1). This is represented symbolically as:

$$X = 0,$$
$$0 \geq X \leq 1,$$
$$X = 1$$

Equation 1. Fuzzy logic parameters of the model of Neo-metaphysics of quality for low and high quality

Or visually as:

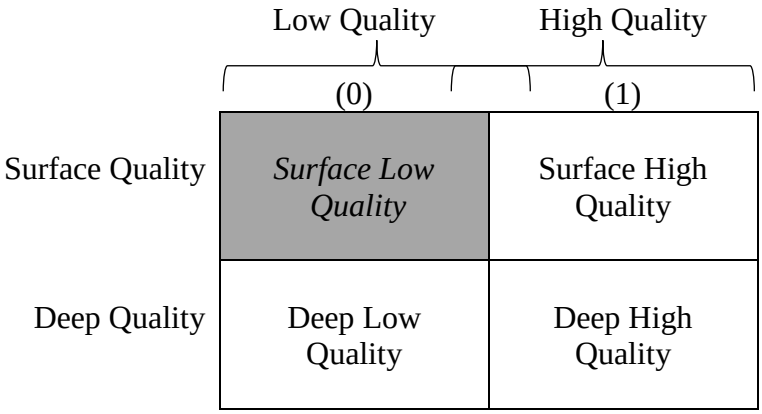


Figure 40. Visualisation of Fuzzy Logic applied to the model of Neo-metaphysics of Quality

As demonstrated in the equation above and in Figure 40 the application of fuzzy logic allows for the boundaries between what would be considered low quality and what would be considered high quality to be 'blurred', principally due to the difficulty in clearly establishing the boundaries between low and high quality. This is the result of the individual interpretation of quality, as explored in thought experiment one. As such the boundaries of each are unknowable. These unknowable boundaries are reflective of the work by Williamson (1992a, 1992b, 1994), and Sorenson (1988).

Potentially the same fuzzy logic model could be applied to the second measurement problem (Measurement Problem 2) also. The boundaries, although clearer by definition through the passage of time, may be viewed an unknowable, based on the works of Williamson (1992a, 1992b, 1994), and Sorenson (1988).

$$Y = 0,$$
$$0 \geq Y \leq 1,$$
$$Y = 1$$

Equation 2. Fuzzy logic parameters of the model of Neo-metaphysics of quality for surface and deep quality

Or visually as:

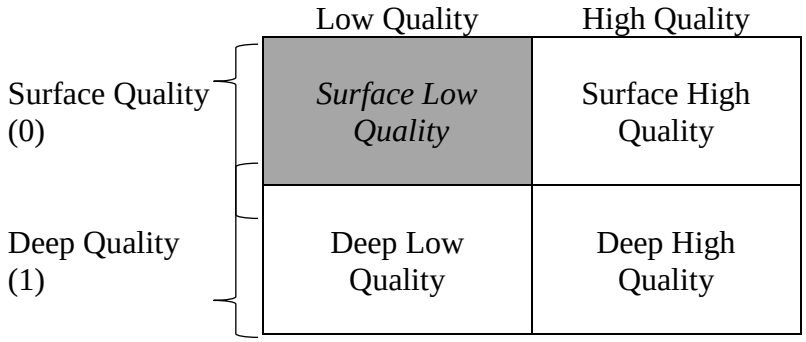


Figure 41. Visualisation of Fuzzy Logic applied to the model of Neo-metaphysics of Quality

The second potential solution to the measurement problem, for measurement problem one, is the use of group consensus. In this solution, agreement amongst a group of individuals is reached based on what the proportion of people would interpret as low or high quality. Collins (2018) discussed this in the context of that given a group of individuals the distribution of views provides the probability for an expected value. In this case, a group of individuals collectively interpret an object as having low quality, then high probability suggests that another group of individuals will collectively reach the same conclusion, and therefore provides the expected value (quality) of that object.

From a practical perspective this solution has greater application than the fuzzy logic solution, which may appear more robust but is impractical to implement.

Example Six: Quality of Educational Programmes Revisited.

In example two the quality of an educational programme was considered, and the perception of several students (Student A, B, C) provided, each with their own view as to the quality of the programme. This demonstrated the two measurement problems, from both an internal and external view point. Internal being, with fluctuations in perceptive quality within the individuals themselves (Student A, B, C) and external being, the variation across individuals. The two solutions to the measurement problems often address only the agreement of external viewpoints and the internal variation of individual in their interpretation of quality will remain. As such the group consensus offers the most practical solution in the measurement of quality, particularly in the context of educational delivery. However, this group consensus should involve all potential stakeholders to offer a true representation of the object or services under consideration. In this case, stakeholder would include, but not be limited to, students, academic staff, managerial staff and employer (as an invited stakeholder in the graduates). To achieve this the perceptions of each individual would need to be sought and collated to determine the expected value. Figure 42 below works though the viewpoints of each student, as described in example two, to demonstrate how this would be achieved. The darker the colour the greater the level of group consensus. In the case of example two, the quality of the educational programme under consideration resulted in a group consensus of deep high quality.

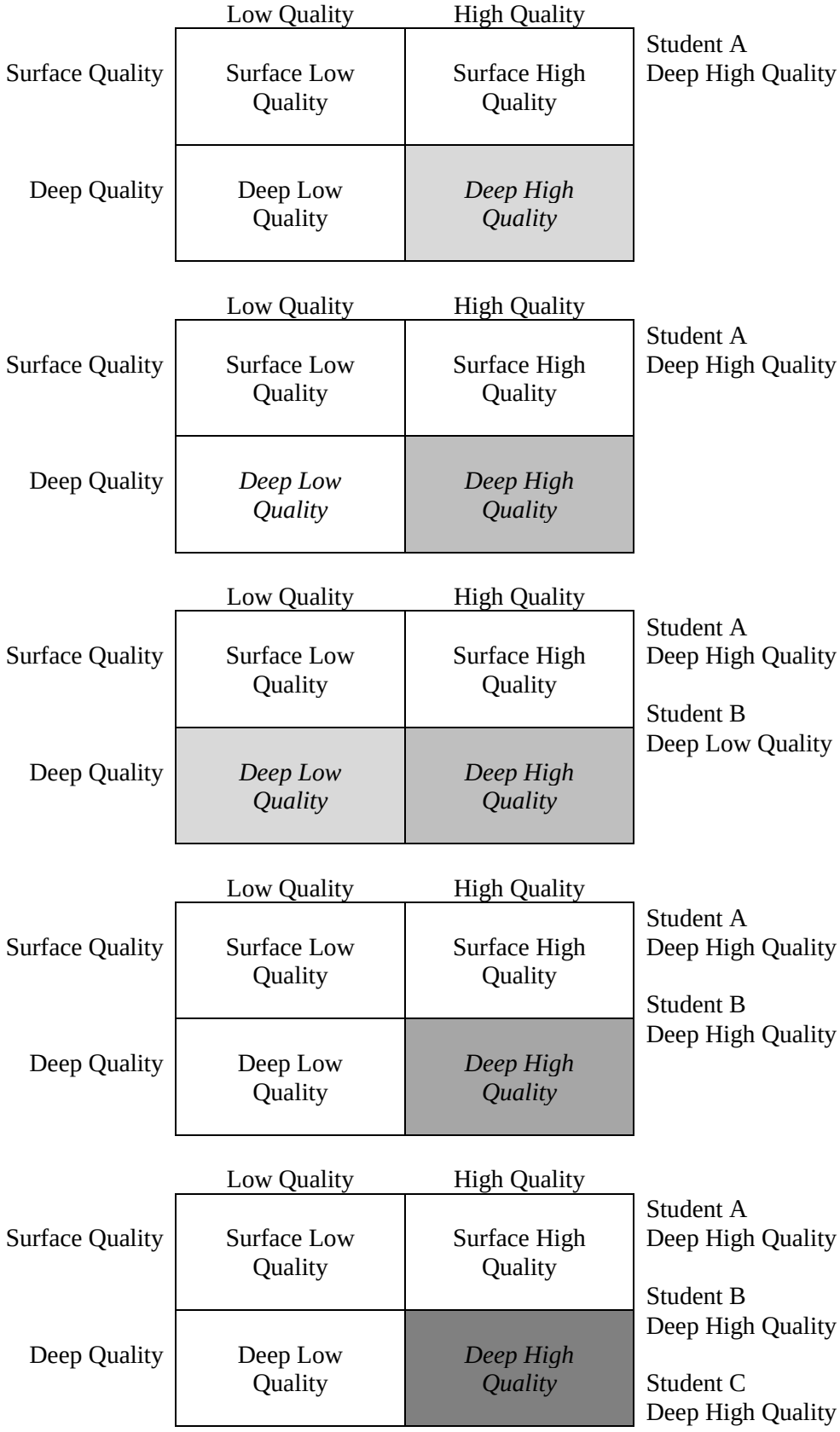


Figure 42. Application of Neo-Metaphysical Model of Quality to an Educational Programme using Group Consensus

Chapter Summary

Within this chapter several examples have been provided to establish the potential application of the proposed neo-metaphysical model of quality. These selected examples, which can be linked by to the Chautauquas illustrated throughout this thesis, demonstrate the application of the theoretical model across different levels of educational delivery and management. Additional examples, outside the educational environment, have also been provided to test the robustness of the model. In the application of the neo-metaphysical model of quality the measurement problem described in Chapter Five has exemplified within a practical context, which has resulting in the need to revisit both the Observer Effect and the Interaction Effect.

In the latter half of this chapter two potential solutions to the measurement problems have been detailed: the use of fuzzy logic, which offers a mathematical solution and the concept of group consensus, which suggests a practical solution. The use of the group consensus, as a solution to the measurement problem was then applied to the consideration of the quality of an educational programme such as the example described in Example Two.

Chapter Eight: Conclusion

(van den Dungen, 2016, p. 57)

X. In the World

Barefooted and naked of breast,
I mingle with the people
of the world.
My clothes are ragged and dust-laden,
and I and ever blissful
I use no magic to extend my life;
Now, before me, the dead trees
become alive.

(Koller, 2016, p.7)

Robert Pirsig's books *Zen and the Art of Motorcycle Maintenance* and *Lila*: *An Inquiry into Values* have become iconic texts in the genre of philosophical fiction, particularly the former with 5 million copies sold worldwide to date. Both text offer a unique insight in the field of metaphysical and Zen practice, yet they are not held in high regard as being scholarly works by academic standards, which is interesting given the nature of the inquiry into quality within education, specifically teaching practice. Zen, in particular, has generated a following and still receives attention, discussion and analysis through numerous online discussion boards and blogs, and developmental stories of the digital age. It is through these continual discussions that Pirsig's Metaphysics of Quality will live on.

The aim of this thesis was to examine the metaphysics of quality, in part, to determine the presence of quality as a thing within the context of the the polytechnic and private training sector. The objectives presented were to:

1. Examine the concept of quality, with a focus on the polytechnic and private training sector
2. Analyse and critique the metaphysics of quality
3. Re-define the metaphysics of 'quality' as it applies to the polytechnic and private training sector
4. Offer a conceptual framework on how to measure/evaluate quality in education

This final chapter will offer a summary of the investigation in the quality, within the polytechnic and private training sector content, which has taken place

and offers a summative conclusion for each of the four objectives presented above.

Examine the Concept of Quality

As Power (1997) stated in text entitled *The Audit Society: Rituals of Verification*, individuals are *"constantly checking up on each other, constantly monitoring the on-going stream of commutative exchanges and accounts that make up daily life"* (p.1), with audits and evaluation becoming common place in all aspect of the public and private sector, education being no exception. Brigg (2003) refers to the increasing focus which is being placed on academic staff to undergo an array of evaluation type processes with quality of educational delivery being at the heart of such inquiries. Within the New Zealand the polytechnic and private training sector context such evaluative inquiry came in the form of the NZQA External Evaluation and Review, as stipulated under section 253 of the Education Act, whereby the quality of educational programmes are measured and institution classifications provided (ITPQuality, 2010). However, what quality is, beyond a series of standards, is not clearly stated. This line of inquiry continued. During a series of strategic development workshops the 'concept' of quality was raised in regard to what 'quality' actually was. It was suggested that if it was unclear as to what quality was, how could be it measured?

Since the mid 1940's quality management has been an evolving discipline (Garvin, 1999). From the early stages of inspection, through to quality control and quality assurance, to total quality management and most recently business excellence, the discipline has seen change in the approach to management and improvement. However, over this time, little attention has been given to 'quality' as a concept, with few authors attempting to offer a definition. Davies (2003)

refers to quality as a nebulous concept which embraces but is not synonymous with effectiveness and accountability. Ellis (1993) considers the term quality to be ambiguous with connotations of both standards and excellences, whereas Pfeffer and Coote (1991) consider quality to be a slippery concept. This lack of clarity is not new with Plato's reference to quality being no clearer: *"Quality is the 'knife-edge' of experience found only in the present, known or at least potentially accessible to us all"* (Phaedrus, 258d). This level of ambiguity is captured by Pirsig who stated *"Quality … you know what it is, yet you don't know what it is"* (1974, p. 231). Pirsig continued this line of thinking suggesting that *"if you can't say what quality is, how do you know what it is, or how do you know that it even exists?* (p.231).

The works of Robert Pirsig can be viewed as the seminal works for the investigation into the existence of quality from a philosophical perspective. His inquiry into quality in *Zen and the Art of Motorcycle Maintenance: An inquiry into Values* formed the foundation of his metaphysics of quality, a theoretical position which he later expanded upon in his second book *Lila: An Inquiry into Morals.* However, from the point of offering a definition of quality, Pirsig's definition is no clearer that those already stated.

> *"Quality is shapeless, formless, indescribable. To see shape and forms is to intellectualise. Quality is independent of any such shapes and forms. The names, shapes and forms we give Quality depend on partly on the Quality"* (Pirsig, 1974, p. 318)

What Pirsig does offer is a theoretical framework in which the exploration of quality can occur.

The Metaphysics of Quality

Pirsig views quality as a perceptual experience which occurs before any formal descriptive or academic processes take place. He suggests that quality can only be categorised in two forms, Static Quality (patterned) and Dynamic Quality (un-patterned). However, before quality can take either form the process of immediate experience has to be undertaken. In Pirsig's theoretical construct of quality, a thinking individual (based on the works of Kant) needs engagement with the item or services on which the quality is to be applied. This process is the immediate experience. As McWatt (1998) phrases it, only after the experience does the concept of the perceiver and the perceived arise. Once this level of engagement has occurred and the immediate experience has taken place can quality be divided into either dynamic quality or static quality. Pirsig's dynamic quality remains in a state of flux and is explicitly linked to the immediate experience. Once these dynamic quality patterns start to develop through a conceptualisation process into recognisable formal patterns then Static Quality Patterns occur. This process is illustrated in Figure 43.

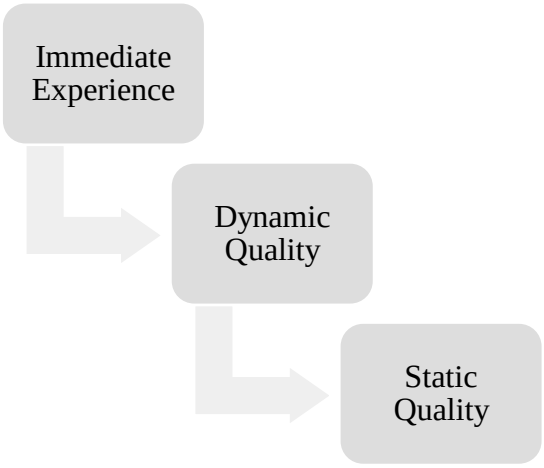


Figure 43. The Relationship between Pirsig's Dynamic Quality and Static Quality

Once Static Quality Patterns have been determined, quality is classified into four different levels as depicted in Figure 44. At this point, it is the view of the author that quality breaks down and separate individual classifications take over. For example, at the inorganic level different patterns can be identified such as separate chemical compounds.

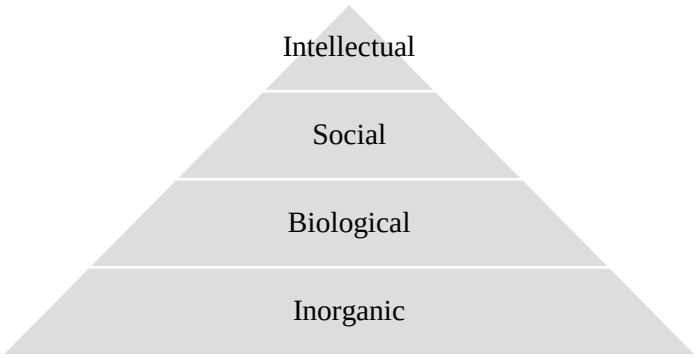


Figure 44. Pirsig's Four Levels of Static Quality Revisited

Beyond this binary classification, Pirsig offers not further means of measuring of identified different levels of quality. In his text *Lila,* Pirsig does refer to low and high quality, but this is not explained. This is one area which has been addressed in the examination and redevelopment of Pirsig's metaphysics of quality.

The Neo-Metaphysics of Quality

Expanding on Pirsig's metaphysics of quality and through the incorporation of quantum mechanical concepts a new metaphysical model of quality has been proposed, entitled the Neo-metaphysical Model of Quality, and is visually represented in the figure (Figure 45) below. The model is representative of Pirsig's Concept of Immediate Experience and Dynamic Quality. His concept of Static Quality is not featured in the model, for within this model of Quality static elements form separate components, as discussed above.

Low Surface Quality	High Surface Quality
Low Deep Quality	High Deep Quality

Figure 45. The Neo-metaphysical Model of Quality

The neo-metaphysical model of quality provides four categories for quality at the point of immediate experience before any form of intellectual process occurs, at which point one of the two measurement problems occurs. On the initial experience with objects or services in quality the individual will determine a level of quality at a surface level, this being either low or high. At this point, the observer effect occurs in that the simple act of observation changes the state of the object under observation, in this case, whereby the initial level of quality is formed. As has been discussed, depending on the prior knowledge and experience of the individual, different initial quality states may be determined by different individuals. After the initial quality states have been established the continual interaction with the object or service on which quality is being applied will shift from the surface level to the deep level. This process will result in the interaction effect occurring and lead to second measurement problem.

The observer effect and the interaction effect form the cornerstone of the measurements issues associated with quality. If quality is to be measured, then these two issues need to be addressed and solutions provided. What has been identified within this thesis, through the use of thought experiments are two potential solutions to the measurement problems. The potential for the practical application of the neo-metaphysical model of quality sets it apart from Pirsig's purely philosophical work. What has been suggested is that a group consensus model of practice be applied to any measurement of quality. In educational terms

this would involve the development of communities of practice which included all stakeholders and not a select few. It is important to note however, that as soon as any form of examination of quality occurs that a different set of criteria and standards are being investigated. The measurement of quality, as viewed in this thesis, needs to occur before intellectualisation begins. Quality within the neo-metaphysical model is an experience.

Quantum Quality

In order to operationalise the neo-metaphysical model of quality a new approach to quality measurement has been proposed, as visualised in Figure 45. This model as has been stated is based on quality being considered an experience. As the neo-metaphysical model of quality has been developed utilising concepts from quantum mechanics the term Quantum Quality has been suggested. This is not a new term within the field of quality management being previously used by Miller in 1993. Other than the name drawing on the concepts which have been used in the redevelopment of Pirsig's approach to quality, it is suggestive that quality management as a discipline needs to take a quantum step forward and embrace the method of quality measurement outlined in this thesis. Quality as an experience, beyond the standards and criterion we create, needs to be viewed as something which exists outside of time and space and created by the reality of individuals. Without someone to perceive it quality does not exist. If we all viewed quality as a dynamic fluid experience which can and will change over the life time of product or service, then a holistic approach to quality management will naturally follow.

"Care and Quality are internal and external aspects of the same thing. A person who sees Quality and feels it as he works is a person who cares. A person who cares about what he sees and does is a person who's bound to have some characteristic of quality." (Pirsig, 1974, p.353)

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Appendix One: The Ox Herder

I. The Search for the Bull

(van den Dungen, 2016, p. 10)

In the pasture of the world
I endlessly push aside the tall
grasses in search of the bull.
Following unnamed rivers,
lost upon the interpenetrating
paths of distant mountains,
My strength failing and my vitality
exhausted, I cannot find the bull.
I only hear the locusts chirping
through the forest at night.

(Koller, 2016, p.3)

II. Discovering the Footprints

(van den Dungen, 2016, p. 17)

Along the riverbank under the trees,

I discover footprints.

Even under the fragrant grass,

I see his prints.

Deep in remote mountains they are found.

These traces can no more be hidden

than one’s nose, looking heavenward.

(Koller, 2016, p.3)

III. Perceiving the Bull

(van den Dungen, 2016, p. 22)

I hear the song of the nightingale.
The sun is warm, the wind is mild,
willows are green along the shore –
Here no bull can hide!
What artist can draw that massive head,
those majestic horns?

(Koller, 2016, p.4)

IV. Catching the Bull

(van den Dungen, 2016, p. 26)

I seize him with a terrific struggle.

His great will and power

are inexhaustible.

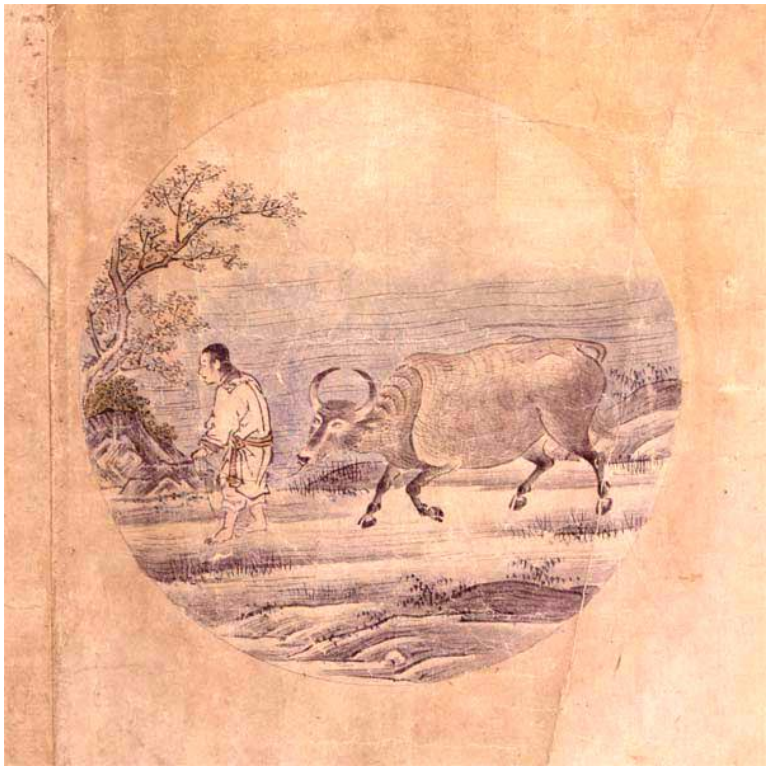
He charges to the high plateau

far above the cloud-mists,

Or in an impenetrable ravine he stands

(Koller, 2016, p.4)

V. Taming the Bull



(van den Dungen, 2016, p. 33)

The whip and rope are necessary,

Else he might stray off down

some dusty road.

Being well-trained, he becomes

naturally gentle.

Then unfettered, he obeys his master.

(Koller, 2016, p.5)

VI. Riding the Bull Home

(van den Dungen, 2016, p. 38)

Mounting the bull, slowly
I return homeward.
The voice of my flute intones
through the evening.
Measuring with hand-beats
The pulsating harmony,
I direct the endless rhythm.
Whoever hears this melody
will join me.

(Koller, 2016, p.5)

VII. The Bull Transcended

(van den Dungen, 2016, p. 42)

Astride the bull, I reach home.

I am serene. The bull too can rest.

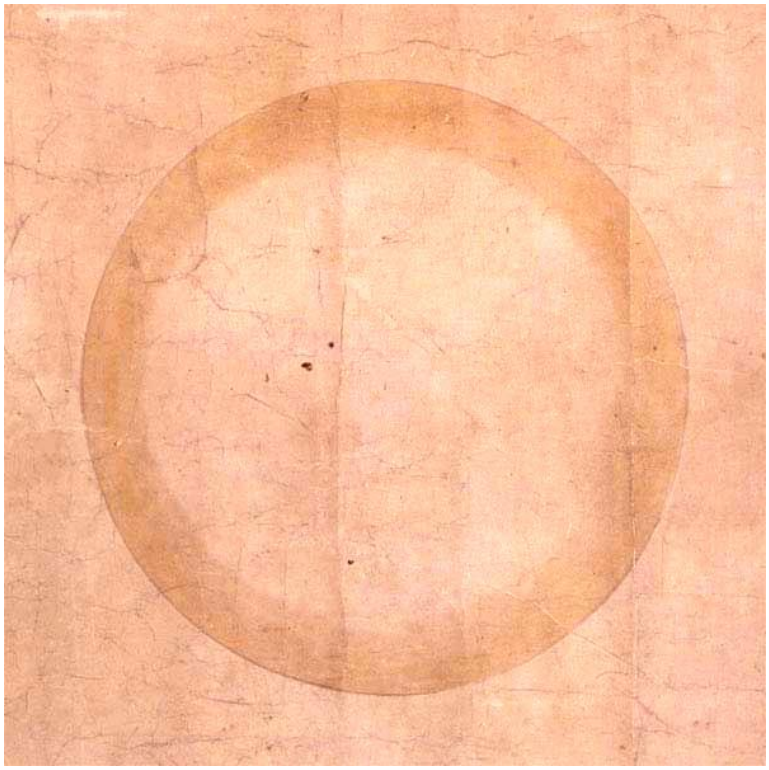
The drawn has come, In blissful repose,

Within my thatched dwelling

I have abandoned the whip and ropes.

(Koller, 2016, p.6)

VIII. Both Bull and Self Transcended



(van den Dungen, 2016, p. 47)

Whip, rope, person, and bull –

All merge in No Thing.

This heaven is so vast,

No message can stain it.

How may a snowflake exist

in a raging fire.

Here are the footprints of

the Ancestors.

(Koller, 2016, p.6)

IX. Reaching the Source

(van den Dungen, 2016, p. 52)

Too many steps have been taken
returning to the root and the source.
Better to have been blind and deaf
from the beginning!
Dwelling in one's true abode,
unconcerned with and without –
The river flows tranquilly on
and the flowers are red.

(Koller, 2016, p.7)

X. In the World

(van den Dungen, 2016, p. 57)

Barefooted and naked of breast,
I mingle with the people
of the world.
My clothes are ragged and dust-laden,
and I and ever blissful
I use no magic to extend my life;
Now, before me, the dead trees
become alive.

(Koller, 2016, p.7)